AUGUST 1952

FIREMEN

FIFTY-SEVENTH YEAR • NATIONAL FIRE PROTECTION ASSOCIATION

VOLUME 19, NUMBER 8, COPYRIGHT 1952 NATIONAL FIRE PROTECTION ASSOCIATION PRINTED IN U. S. A.

Welcome to Boston
I. A. F. C.

August 25-28

Helping You Cut Fire Losses

As leading manufacturers of fire fighting equipment, Rockwood makes many products that contribute vitally to the quick extinguishment or effective control of all kinds of fires. On these pages are representative Rockwood products that daily play a vital role in fire protection programs throughout the nation.

For further details on these products, and many, many others, write for your free copy of the Rockwood Catalog, "Fire Fighting Products." ROCKWOOD SPRINKLER COMPANY, 88 HARLOW STREET, WORCESTER 5, MASS. Distributors in all principal cities.

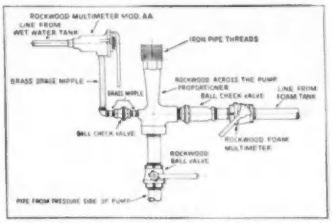
ROCKWOOD

See the Latest Rockwood Products on Display in Boston during the Convention of the International Association of Fire Chiefs — Booths #1-2-3.

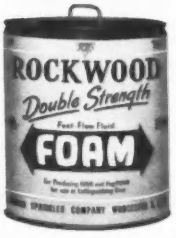
Type FFF FogFOAM Nozzle. Discharges FogFOAM, Solid FOAM stream, and High Velocity WaterFOG.

Type SG-48 WaterFOG Nozzle. Easy to handle. Discharges high or low velocity WaterFOG or straight water stream.

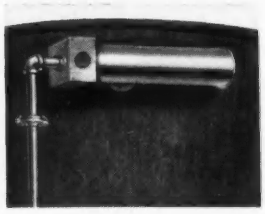
Foam Eductor. Introduces FOAM liquid into hose lines. Used with Type FFF FogFOAM Nozzles.



Proportioning Systems. Used when pressure is maintained by pump. Custom-engineered systems also available.

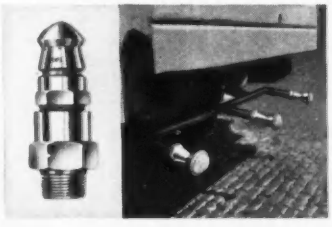


Double Strength Foam Liquid for fire hose line Nozzles and permanently piped FogFOAM and FOAM installations.



Rockwood Foam Maker and Chamber. Used for fighting flammable liquid tank fires.

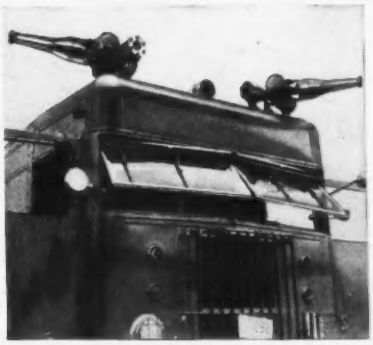
Standard Straight Foam Play Pipe and FOAM pick-up tube. Discharges solid FOAM stream.



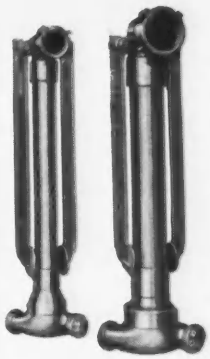
Under Truck and Ground Sweep Nozzles. Used to protect front of fire trucks and parts under trucks.

ROCKWOOD

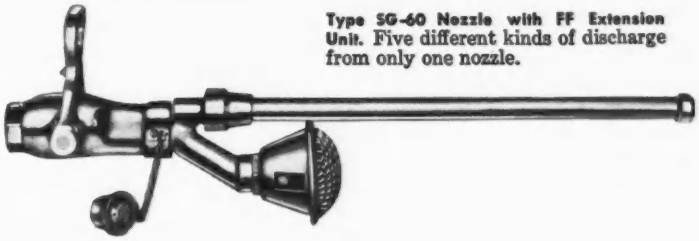
SPRINKLER COMPANY



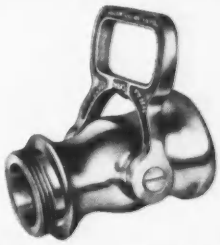
Hydraulically or Manually Controlled Type FFF FogFOAM Turret Nozzle for airport crash fire fighting trucks and special fire fighting trucks for oil refineries, chemical and industrial plants and municipalities.



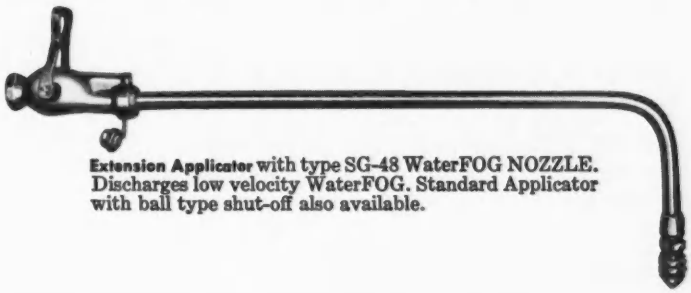
Lightweight Rotating Cellar and Attic Pipe. Fights fires in cellars, attics, under piers, bridges, etc. Also available in a short unit with swivel but without extension barrel.



Type SG-60 Nozzle with FF Extension Unit. Five different kinds of discharge from only one nozzle.



Rockwood Ball Type Shut-Off. Gives operator complete control of water flow from nozzles.

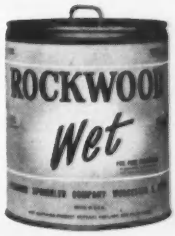


Extension Applicator with type SG-48 WaterFOG NOZZLE. Discharges low velocity WaterFOG. Standard Applicator with ball type shut-off also available.

High Capacity WaterFOG Nozzle. Quickly controls and extinguishes large fires in buildings and flammable liquids.

Type N22 WaterFOG Nozzle. Discharges high velocity WaterFOG. For general use around live electrical equipment.

Rockwood Type N-23 WaterFOG Nozzle with swivel handles. Discharges high velocity WaterFOG with higher discharge, greater range than type N-22 Nozzle.



Rockwood Wet wetting agent. Increases fire extinguishing action of water making a little water go a long way.

Engineers Water . . . to cut fire losses

and Last

First Name in Hose Reels

HANNAY

HANNAY has a hose reel for every purpose, for every business or industry employing hose.

In the petroleum and chemical industries, in aviation, and among the nation's leading manufacturers of fire fighting equipment, the name HANNAY is synonymous with "best".

Stationary and mobile types, hand or motor operated. Also special reels for special jobs such as cable reels for portable X-ray and lighting installations.

When good hose reels are needed, standard or special purpose, put your problems up to Hannay.

New EXPLOSION-PROOF Model

Developed to overcome dangers previously associated with electrical rewinds. Sealed, Underwriters-approved motor protected against fog, foam, water and fumes. Safe, controlled rewind speed. Acclaimed by users, "the safest, most efficient Hose Reel ever built!"

Look for this...

©1952 C.B.H. & S., Inc.

HANNAY
REG. U.S. PAT. OFF.
HOSE REELS
CLIFFORD B. HANNAY & SON, INC.
WESTERLO, NEW YORK

We Salute:

The Progressive Fire Chiefs and Their Departments

AN outstanding example is the Fire Department of Boston, host city to the Convention of the International Association of Fire Chiefs.

These progressive fire fighters added to their equipment a fleet of engines of the type you see above*. Beside the latest of water equipment, they carry 750 lbs. of CARDOX Low Pressure Carbon Dioxide. By adding the fast, non-destructive action of carbon dioxide, these trucks provide faster, surer extinguishment of gasoline, oil, electrical and many other kinds of fires difficult or impossible to handle by conventional apparatus.

Ask The Men Who Use Them!

While at the International Association Convention, be sure to inspect these trucks. Ask the men assigned to them about their performance and the results they have achieved. You'll be able to judge intelligently the place of similar equipment in your department.

CARDOX manufactures a full line of carbon dioxide, carbon dioxide-and-water and carbon dioxide-and-foam trucks as well as Airport Fire Trucks. Write for complete descriptive folios.

*Built by Mack Manufacturing Corporation. Low pressure carbon dioxide equipment by CARDOX. Similar equipment can be specified for use with any make of apparatus.

CARDOX CORPORATION • BELL BUILDING • CHICAGO 1, ILLINOIS

IS THIS YOUR CITY?
FOR
FIRE
FIRE
OPEN
THEN
PULL DOWN
HOOK
32
TOO FEW - TOO LATE!
Nearly 400,000 fires and two-thirds of the life loss by fire occur annually in residences. Delayed alarms and tragic consequences are frequently caused by inadequate box distribution in residential districts.

TRADE MARK
GAMEWELL
REG U.S. PAT. OFF.

The **GAMEWELL COMPANY**

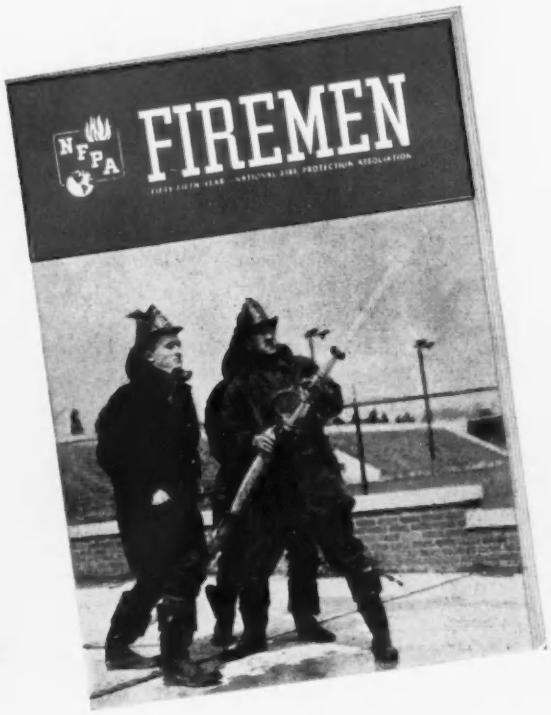
NEWTON UPPER FALLS 64, MASSACHUSETTS

IN CANADA: NORTHERN ELECTRIC COMPANY, LTD., BELLEVILLE, ONTARIO

NATIONAL FIRE PROTECTION ASSOCIATION

INTERNATIONAL

Invites you to enroll as a Fire Department Member



PERHAPS this is the first time that you have been informed of Fire Department Membership in the NFPA. Or, perhaps you are already one of more than 24,000 fire fighters who are receiving subscriptions to FIREMEN through the membership of their departments. In either case, you are cordially invited to enroll as an Individual NFPA Fire Department Member.

As a member of the uniformed fire service, your membership will cost $12.50 per year and will include subscriptions to FIREMEN, to the monthly *Fire News*, to the NFPA *Quarterly*, and also a number of important publications which are made available to members from time to time. You will also receive a handsome membership certificate, suitable for framing.

If your fire department enrolls as a unit, or if you are a fire chief, then SIX (6) subscriptions of FIREMEN will be included in the membership, together with the above publications, for the same $12.50. If you desire to have more than six subscriptions sent to your department, then additional subscriptions will cost $1.25 each.

NFPA Fire Department Membership is available to individuals in the uniformed fire service, to any paid, call, or volunteer fire department, and to industrial fire brigades. The "six-copy" plan of membership is available only to chiefs of fire departments and fire organizations as unit members.

Other members of NFPA may secure subscriptions to FIREMEN for $1.25 per year in addition to regular membership dues. Any additional subscriptions to FIREMEN also cost $1.25 per year.

Why not be well-informed in matters pertaining to fire protection? Merely fill out the application blank below and mail it to the NATIONAL FIRE PROTECTION ASSOCIATION, 60 Batterymarch Street, Boston 10, Massachusetts. You will find NFPA Fire Department Membership an investment that will bring you authoritative information that you need to build a strong fire defense.

F-10-50

NATIONAL FIRE PROTECTION ASSOCIATION
60 Batterymarch Street, Boston 10, Mass., U.S.A.

Application for Fire Department Membership in NFPA

Please enroll .....

Individual ☐
Paid Fire Department ☐
Call or Volunteer Department Company ☐

City or Town..... **County**.....

Mailing Address.....

.....**State or Province**.....

Fire department organizations and chiefs of fire departments joining NFPA should send mailing list for 6 subscriptions to NFPA FIREMEN magazine. Additional subscriptions cost $1.25 each.

Enclosed $12.50 (Check or money order) ☐

Here's What They're Saying About

"Attacking and Extinguishing Interior Fires"

By Lloyd Layman, former chief of the Parkersburg, West Virginia, Fire Department, and author of the book "Fire Fighting Tactics."

134 pages 70 illustrations $3.75 per copy

Special discounts for quantity purchases of 50 or more

From a Fire Chief in New Jersey:

"Allow me to congratulate you for a very interesting and informative book. . . . You deserve a great deal of praise from the fire service for the time and effort you gave to compile this very educational book. . . ."

From the Superintendent of a Fire College:

". . . I have read 'Attacking and Extinguishing Interior Fires' and feel compelled to compliment you on the fine contribution to the Fire Service Training Program. This book . . . will be of great value to future training programs. . . . I can't help but look at this book with its 134 pages of condensed vital information and reflect on the tremendous amount of time you have spent in thinking, planning, and experimenting with water and extinguishment of fires. . . . You are to be highly congratulated. . . ."

Editorial in the Indiana Fire Service Bulletin:

"We have had the pleasant opportunity of reviewing this interesting book. We find it thought provoking and sound in its presentation of a practical method of attacking fires of the type mentioned. It is not based on theory, but presents case histories of actual fire fighting experiences and we highly recommend this book for your digestion. Read it — experiment as Chief Layman has done and we believe that you will join us in complimenting him for a fine contribution to the nation's fire service."

From an editorial in the "Florida Fireman":

". . . 'Attacking and Extinguishing Interior Fires' describes up-to-date methods of water application in fire fighting and reveals scientific truths that can no longer be ignored by the fire fighting profession.

"Those who do ignore the findings of some nine years of study and experimentation explained in detail in this valuable book will find themselves outdated. . . .

"The book sells for $3.75 and will prove to be the best $3.75 investment you ever made . . ."

Get YOUR Copy Now!

By filling out the order blank below and mailing it to the NATIONAL FIRE PROTECTION ASSOCIATION, 60 Batterymarch Street, Boston 10, Massachusetts, you can receive promptly your copy of this important book.

"Attacking and Extinguishing Interior Fires" is excellent reference material for the training of fire fighters in the latest techniques. In addition to the few letters shown above the book has received a wide and favorable reception throughout the fire service, since its contents offer valuable information to chiefs, fire fighting instructors and fire fighters of all fire departments.

Write today to the NFPA to obtain your copy of "Attacking and Extinguishing Interior Fires" and keep posted on up-to-date methods of fire fighting.

Use This Convenient Order Blank Today!

F-6-52

NATIONAL FIRE PROTECTION ASSOCIATION
60 Batterymarch Street, Boston 10, Massachusetts

Please send me.....copies of "Attacking and Extinguishing Interior Fires."

Name .....

Address .....

County..... **State**.....

☐ Enclosed find check or money order for $.....

Firemen

Volume 19 — Number 8

WARREN Y. KIMBALL — EDITOR
PAUL R. LYONS — ASSOCIATE EDITOR
HENRY S. GERE — ADVERTISING MANAGER

Published monthly for the fire service members of the
NATIONAL FIRE PROTECTION ASSOCIATION

A VOLUNTARY NON-PROFIT ORGANIZATION
60 BATTERYMARCH ST., BOSTON 10, MASS.

PERCY BUGBEE — GENERAL MANAGER
CHARLES S. MORGAN — ASSISTANT GENERAL MANAGER
ROBERT S. MOULTON — TECHNICAL SECRETARY
HORATIO BOND — CHIEF ENGINEER

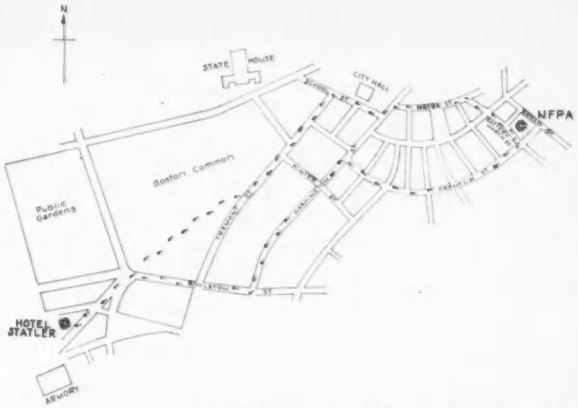
Contents for August 1952

	Page
Current Problems of the Fire Service, by Chief Henry G. Thomas	10
The Boston Fire Department, by Warren Y. Kimball	12
New Addition to Firemen's Home in Hudson, New York	14
New Booklet on Aircraft Crash Rescue Problems	14
Fires in the News	15
Newark Township, Ohio, Fire Department	16
More About Hose Sizes	18
Sidelights of Municipal Fire Protection, by Herbert R. Bogardus	19
Rescue Equipment of Columbus, Ohio, Fire Department	20
Good Stop at Jersey City, N. J., Hospital Fire	21
Industrial Fire Protection	22
Dangerous Fuel Oil Installation	24
How Do Your Hydrants Face?	24
Dates to Remember	25
NFPA Member Departments	26
Ladder Loading	28
Greenwich Graduation	28
Two Brooklyn Fires	30
Railway Fire Prevention Car	32
New Instructor's Manual	32
Membership Report	36
Indian Fire Fighters	38
Publication Notice	40
Western Pennsylvania Firemen's Association	40
A-Bomb Shelter in Existing Buildings	40
Georgia State Firemen's Association	40
What's New in Fire Equipment?	42
Index to Advertisers	42

Welcome IAFC

The International Association of Fire Chiefs is holding its 79th Annual Conference in Boston this month — August 25–28. It is fitting that the chiefs of municipal fire departments should return to Boston, which may fairly be designated as "the Hub of the Universe," as far as fire protection is concerned.

Boston is the international headquarters for the National Fire Protection Association which has members in some 53 nations of the free world. It is the headquarters for the Inspection Department of the great Factory Mutual Fire Insurance Companies which maintain their large testing laboratories in nearby Norwood on the Boston-Providence turnpike (U.S. Route 1). Boston had the first municipal fire alarm telegraph system in the country and today has one of the best and most complete alarm systems. It was one of the first to use radio extensively and has been regularly broadcasting



all alarms to fire chiefs' cars and other units via radio for 25 years.

Boston has a metropolitan water system perhaps unequalled in the country, supplemented by powerful high pressure water main service exclusively for fire fighting. There is probably a greater proportion of private property having automatic sprinkler equipment and automatic detection equipment than in any other comparable area in the country. Three private central stations provide automatic sprinkler supervisory and automatic fire detection service. The Boston Fire Department is the largest for any city of equal population and area in the world. The Municipal Yearbook for 1952 reports 2452 fire fighters and 185 pieces of apparatus covering an area of only 47.81 square miles. There are 50 engine companies, each operating 2 pieces of apparatus, 3 fireboats, 34 ladder companies, 3 rescue companies, and 3 lighting plant units. The concentration of ladder trucks is undoubtedly the greatest in any fire department. Two ladder companies respond to almost every box alarm. The department has one of the greatest forces of chief officers of any city. There are more chiefs in the Boston Fire Department (17 deputy chiefs and 50 other chief officers) than there are firemen in many departments commanded by IAFC members.

Boston as a fire service center should provide a most interesting convention city to the IAFC. Many fire chiefs of prominence in the United States and Canada are members of NFPA and are serving on many NFPA technical committees. The NFPA Executive Offices at 60 Batterymarch Street will be expecting visits from chiefs who are interested in seeing the offices where the famous NFPA *Quarterly*, *Fire News*, FIREMEN, and other NFPA publications are produced.

The map at the top of this page may be helpful for those who wish to visit the NFPA. The Statler is about a twenty-minute walk from 60 Batterymarch Street, or about a sixty-cent fare by taxi. The shortest route is along Boylston, Washington and Franklin Streets, while a more picturesque path may be taken through Boston Common, along Tremont to School Street down School to Water Street, thence to Batterymarch Street.

Cover Picture

This month's cover (United Press photo) shows Chicago, Illinois, fire fighters battling a five-alarm fire at the Witco Chemical Company in that city on June 11. Heavy winds and close exposures made fire fighting difficult. Further details may be found on page 15 of this issue.

Current Problems of the Fire Service

By Chief Henry G. Thomas, Hartford Fire Department, 2nd Vice-President, International Association of Fire Chiefs

From an address given at the 56th Annual Meeting of the NFPA in New York City

IT IS a privilege for me to speak to you ladies and gentlemen at the 56th Annual Meeting of the NFPA and to represent Rudolph Swanson, the President of the International Association of Fire Chiefs. I bring to you his greetings and the best wishes of the International Association for a successful meeting and for a continuance of our cooperative effort over many years for the purpose of reducing fire losses of both lives and property.

Being a municipal fire chief, I am intimately acquainted with many of the problems that concern the fire department of today. We may stop and reflect that the year 1951 produced an all-time high in fire losses, in the vicinity of $823.5 million and also some 302 "large loss" fires, each with a loss of $250,000 or over. Nearly half of this total annual loss was in industry.

The particular problems that face the fire chief of today are two-fold. As far as the fire department is concerned, fire protection consists of fire prevention and fire extinguishment. As most of you know, very little modern construction has been done in the last twenty years in our Eastern cities. The fire chief who is close to his job and is aware of his responsibility, is also aware that for 24 hours a day he is "sitting on a keg of dynamite."

WE ARE appreciative, of course, and on behalf of the International Association of Fire Chiefs I would like to here express our appreciation to the National Fire Protection Association, for the many technical committee reports and standards that they have prepared for our use to guide us in fire prevention, to show us how to make old buildings a little bit safer, and to help us to reduce the tremendous loss of life by fire. We are grateful, particularly, for your advertising campaign of the past year, for the wonderful job that the NFPA did in persuading *Reader's Digest* to publish that magazine pointed wholly to fire protection, mainly fire protection in the home. We are also grateful for the many items of visual education the NFPA has prepared for us.

But as Mr. Bugbee said in his report as NFPA General Manager, we are still having an average of 5,000 fires a day. Here in this City of New York, with everything as modern and advanced that scientists and technicians can provide, we still have had in 1951 some 44,000 building fires. In proportion this applies to smaller towns and the smaller communities.

I was thrilled with the presentation from the NFPA to the representative of the National Education Association for the work that they are doing, such as the pamphlets they have prepared for fire prevention training in the public schools. We go along with the idea that if we are ever to educate America to a higher standard in fire safety, then we must start in the schools.

For all of those things the International Fire Chiefs are appreciative. But I wonder, ladies and gentlemen,

Chief Henry G. Thomas of the Hartford Fire Department and Chairman of the NFPA Committee on Fire Department Equipment, delivers his address at the 56th NFPA Annual Meeting.

if we are coordinating our efforts completely or, let us say, sufficiently. Are we getting value in fire protection for the time and the dollars that we have spent?

THE NFPA, the National Board of Fire Underwriters, and the International Fire Chiefs Association, are all interested in the one objective of minimizing fire losses.

The ultimate answer to the containment of fire falls on your fire department. Your fire department chief of today is keenly aware that he can no longer allow his men to sit around a fire station waiting for the bell to strike, waiting for the fire to happen. We are also keenly aware of the fact that we must do our part in preventing fires. We are also aware that the common hazards that Art Ross (Chairman NFPA Committee on Firemen's Training — *Ed.*) stressed — the careless smoker, the flammable liquids, defective heating, the misuse and abuse of electricity — these are still the chief causes of fire.

But the enforcement officer on fire prevention is the fire chief. When I asked whether we are properly coordinating all our efforts, the problem that came to my mind was this: Are we in our respective communities as engineers, as NFPA members, as insurance executives and agents — are we rolling our sleeves and actually going down and helping that fire chief? Are we backing him morally and publicly so that enforcement of fire prevention becomes a little easier? You know and I know that we don't get fire prevention by printing standards and creating laws and ordinances.

WE MUST do more than prepare standards and recommend laws and ordinances. We must give every aid, at the local level, to that officer or fire department charged with the responsibility of preventing fire. It is an economic question. We just don't build buildings to put fire escapes on them. We need that

assistance after these national conferences, after you prepare these various standards and recommended laws and ordinances; we want your help in the functioning end at the local level.

The International Association of Fire Chiefs has been conducting a year-round fire prevention campaign. We have said we wanted to save four thousand children's lives. We have had excellent cooperation and we have had the advice and counsel of the NFPA, Mr. Bugbee and his staff, the National Board of Fire Underwriters and others. Jay Stevens, Executive Secretary of the International, who has handled most of the publicity, has done one thing that to me is outstanding; and to a certain extent it exemplifies what I mean when I say a little assistance at the local level.

Jay asked that reports be sent to him from various localities and municipalities on what had been done in the matter of home inspections. Not all fire chiefs sent in those reports, but many did, and in return Jay Stevens took it upon himself to send a personal letter to the Mayors and Councils of the respective communities where those fire chiefs were stationed giving, as it were, a pat on the back to that fire chief.

That helps, ladies and gentlemen; that helps particularly where the fire chief faces the sometimes insurmountable obstacle of securing sufficient funds to provide the apparatus and the personnel that are required for fighting fire.

AN INCIDENT yesterday morning in one of your sessions brought to my mind a little example of the general public attitude towards this matter of fire department operation. Mr. Stanley Withe, of my home town, and your Chairman of Public Relations, spoke about what the NFPA has been doing during the past year, and it was wonderful. But he said it got to the point where people saw him on the street and they greeted him with "How is Sparky?"* Here is what that meant to me as a fire chief. You, as a fire chief, go about your city, your town, you see the businessman or you meet him, or the industrialist, or your leading citizen, and he may ask, "Any fires today?"

I wonder if our business people at the upper level are not content by merely setting up standards, setting up recommended laws and ordinances and leaving the enforcement of fire prevention to the head of the local department?

As to the matter of fire extinguishment, which is the second phase of the reason for the existence of any fire department, we are faced with several problems.

We are keenly aware that the matter of firemen's training is essential. We know that no fireman in the average municipal department gets enough actual experience through fighting fires to make him a journeyman mechanic. We are very much aware that we must supplement that by training and by drills.

We are also concerned with the manpower shortage. We realize fully that if we have to shorten hours and grant extra days and time off, without getting the extra manpower to take care of those lost man-hours, then we are going to run to fires short-handed and we are going to need second and third alarms. And if we do get the manpower, we are building up the cost of maintaining municipal fire services to an almost exorbitant figure.

THERE are many problems, ladies and gentlemen, facing the fire departments of today, and these need the coordinated effort of all concerned. In addition to the total fire loss of 1951, there should be added approximately two billion dollars for the maintenance of fire protection services. There are some 900,000 volunteers and some 100,000 full-paid men, in addition to the engineers, architects, and technicians that are engaged in fire protection.

I would like to say just a word about another major problem that concerns the fire departments of today, and that is civil defense. I think very highly of Kyle Laughlin and the job he is doing as Director of Fire Services down there for F.C.D.A. But, in my opinion, the entire structure of civil defense must be built on the very foundation of our peacetime services, which is your fire and police departments.

We are aware of the difficulties that F.C.D.A. has had in securing appropriations from Congress. As a local civil defense director I am very much concerned with the inactivity, the apathy, the inertia in Washington as far as civil defense is concerned, and I am referring particularly to Congress and to people at high levels. Your NFPA is on your Advisory Committee of Civil Defense, but if civil defense is needed as much as they say it is, if we are to be the fourth arm of National Defense and be a co-partner in the military, let's have some concrete evidence of it at the Federal level. If we need extra fire fighting equipment, and if the civilians are going to fight the small fires, what are they going to fight them with?

I WOULD like to present my report as Chairman of your Committee on Fire Department Equipment. I would like to tie that in here, because I think it represents what I have been trying to say.

We are all aware, I believe, of the fact that up to this year we have had two sets of specifications for motor fire apparatus. As an officer of the International, with the assistance of Rudy Swanson as President, I have received the unanimous support of the International Fire Chiefs Association. We also have the approval of the NFPA and the National Board of Fire Underwriters, to combine all of our efforts in establishing one set of apparatus specifications, and that will include appliances and other equipment, to the end that that fire chief down there that we are asking to do the job can have available to him one set of specifications by which he or his city manager or his mayor can go out and purchase apparatus with a reasonable assurance that he is getting good equipment.

Ed. Note: The NFPA Annual Meeting unanimously adopted the report of the Committee on Fire Department Equipment covering the 1952 Specifications for Motor Fire Apparatus NFPA No. 19, and the 1952 edition of the Rural Fire Department Standard NFPA No. 192. The committee serves jointly the NFPA and the International Association of Fire Chiefs.

The 1952 Specifications for Motor Fire Apparatus will be published by both the NFPA and the National Board of Fire Underwriters. Similar specifications are available in Canada through the Canadian Standards Association. The NFPA editions include publication in 8½ x 11 in. size in form for use as part of a purchase contract or in obtaining bids from manufacturers.

* The Dalmation dog, fire mascot, used in the Advertising Council's fire prevention campaign. (See June, 1952, Firemen.)

(Left to right) The State House of the Commonwealth of Massachusetts viewed from Park Street, showing the famous dome covered with gold leaf. (2) The Bowdoin Square fire station built in 1930 at a cost of $700,000 is perhaps the largest fire apparatus station in the U. S., exclusive of headquarters stations. (3) View from Columbus Avenue of the Statler, IAFC Convention headquarters.

The Boston Fire Department

Story and photos by Warren Y. Kimball

PROBABLY no fire force in the world concentrates more fire fighting manpower and equipment in a given area than the Boston Fire Department with its 2452 fire fighters and 185 pieces of motor driven fire apparatus. This does not include 40 or more neighboring fire departments which are also well equipped. It is estimated that close to one out of each 100 male residents in the 21–65-age bracket is a city fire fighter.

Like some other large fire fighting organizations the BFD has sometimes appeared slow in adopting modern techniques as compared with some of its smaller neighboring departments, which can more readily assimilate new methods and equipment. Several million dollars worth of new apparatus has been purchased for the Boston Fire Department since World War II. However, the department stuck to spring-raised wooden aerials for its larger ladder trucks, although it did obtain a number of 65-ft. service aerials with metal aerial ladders. Little use is made of ladder pipes; reliance being placed upon water towers for elevated streams.

The department has a number of large capacity carbon-dioxide units and several engine companies carrying foam equipment.

Although of recent vintage, hose wagons have but small capacity booster pumps and tanks even though triple combination pumpers with larger water tanks and 1½-in. preconnected lines, as used in many cities, would appear to give much stronger first aid service and might save many lives, particularly in tenement districts.

THE Boston Fire Department is very strong in heavy stream equipment and also makes some use of 3-in. hose with 2½-in. couplings, both in high value areas and as the first section of each 2½-in. line. High pressure hydrants have 4 outlets each with independent controls and each hydrant can supply about 2000 gpm. At fires in high pressure districts it is not uncommon to see a dozen or more 750 and 1000 gpm pumpers standing by while lines are laid from high pressure hydrants by the hose wagons of the same companies. Some engine companies in districts served by the high pressure pumping stations have hose trucks equipped with several large turret nozzles in addition to portable monitor nozzles mounted on the apparatus of all engine companies.

No department exceeds Boston in its ladder service, including the use of hose lines from ladders. Boston firemen carry hose up ladders with the line between their legs. Although this practice is frowned upon by most fire departments, it seems to have worked well here, almost from "time immemorial." The ladders are built in the fire department shops and are of the solid beam type. They are used much nearer to the vertical position than is common with trussed ladders and generally are secured to the building with metal dog chains.

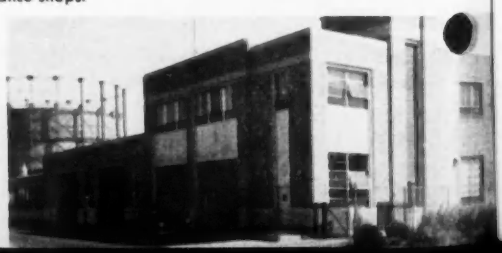
The Fire Alarm Headquarters in "The Fenway" is one of the best and busiest in the United States. It contains an interesting collection of old fire alarm boxes (see FIREMEN for February, 1952). All chiefs' cars, fireboats, rescue apparatus and a large proportion of the engine and ladder companies are radio equipped. The teamwork between the fire alarm radio dispatchers and the fire chiefs and their aides (who must also be telegraphers) is outstanding. The lighting plant trucks act as communication centers at working fires.

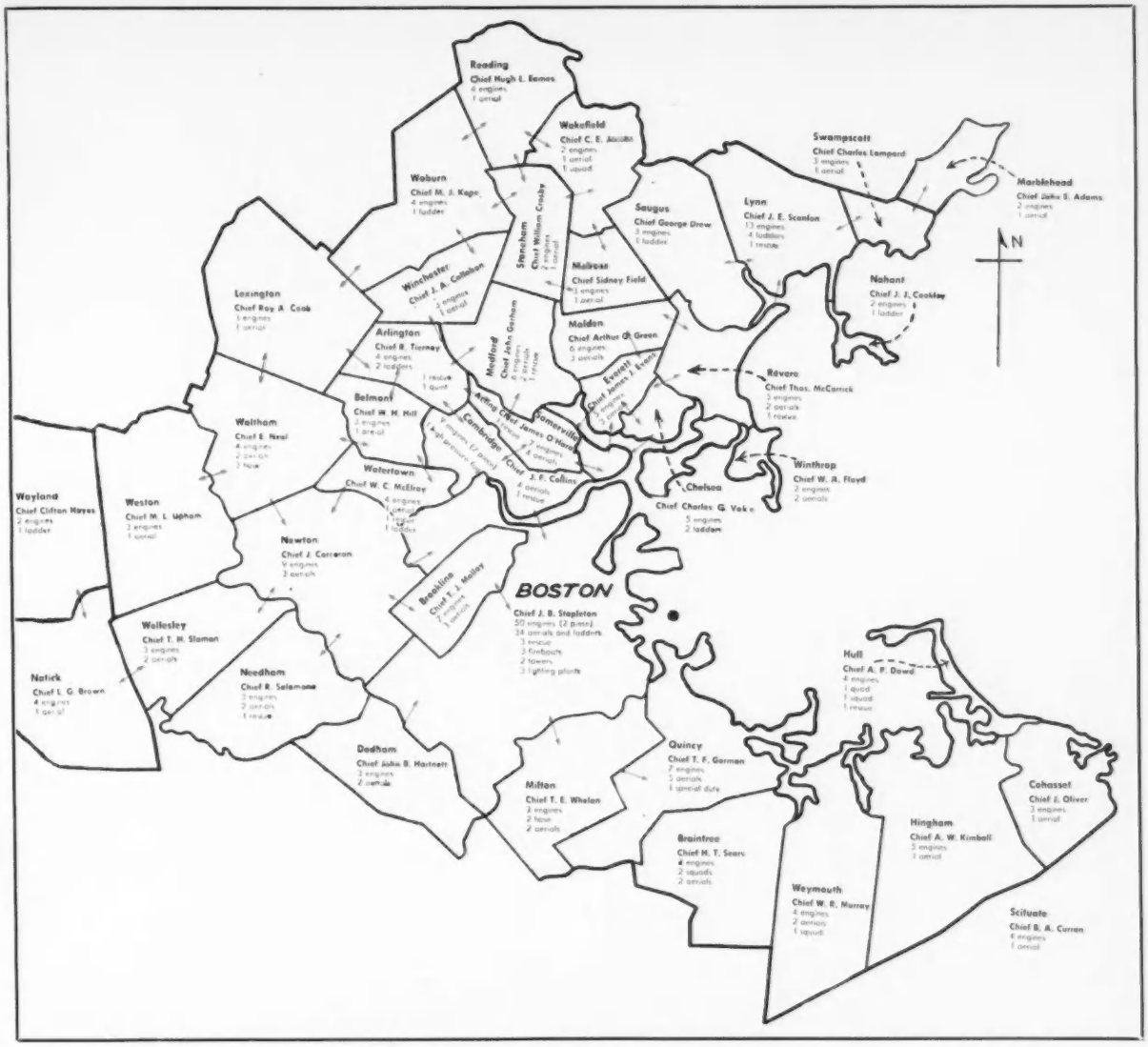
The Department has 4 drill towers, plus access to the Navy Fire School facilities in South Boston. A deputy chief commands the training program.

As in most of the larger cities in Massachusetts, Boston fire fighters work 48 hours a week on a basis of 10-hour day tours and 14-hour night tours, arranged in working groups so that each man averages 2 day shifts and 2 night shifts per week. Days off are granted to compensate for holidays worked. By state law all fire companies are equipped with self contained breathing apparatus to protect the fire fighters, but extensive use is also made of the filter type "All-Service" masks carried on all companies.

RESPONSE to alarms is among the heaviest of any fire department on the continent. High value boxes

(Below, left to right) Fire department headquarters on Southampton Street, one of a block-long group of buildings completed in 1951 at a cost of $1,500,000. (2) View of the Broadway fire station housing Engine 26, Ladder 17, Rescue 1, a water tower, and the Public Relations Office. (3) Rear view of headquarters showing quarters of Engine 23, Lighting Plant 2 and vast maintenance shops.





Mutual Aid Map of Greater Boston

Arrows indicate fire alarm connections between various cities and towns. Most of these are direct fire alarm telegraph connections, but some of the towns use fire department radio systems on a common wave-length, or telephone systems.

bring 4 (2-piece) engine companies, 2 aerials, 1 rescue, 1 "Protective" (underwriters salvage corps), and 1 fireboat (if near the water). In residential areas one less engine company usually responds. In general, telephone calls for building fires are followed by sounding an alarm from the nearest box. A third alarm in high value areas brings 15 engine companies plus other units. The running card includes assignments up to 5 alarms, beyond which extra companies may be called and mutual aid plans placed in operation.

Despite heavy traffic and many narrow streets, the record shows that in over 95 percent of Boston's fire calls, an "all-out" signal has been radioed from a chief's car within 3 minutes of the receipt of the box, indicating that the fire is well in hand.

In years past Boston has been noted for high fire losses and big fires. The Cocoanut Grove fire tragedy involved the second greatest loss of life in a building fire in any American city during this century. However, largely due to the vigilance of the Fire Prevention Division under Deputy Chief Edward F. Montgomery, recently chairman of the NFPA Fire Marshal's Section, the Boston Fire Department has had fewer big fires to fight in recent years. Incidentally, the Fire Prevention Division has a photo and testing laboratory located in new Fire Station 8 in the North End district.

MUTUAL aid between municipal town and city fire departments in the greater Boston metropolitan area has had a long history and probably has developed further than in any comparable area in the United States. This mutual aid has been on a voluntary basis through cooperation between fire chiefs and fire departments. It is not a rigid system but a series of mutual aid agreements designed to fit the individual needs and facilities of the participating fire departments.

First, it should be stated that less than one-third of the population of the metropolitan area resides within the city limits of Boston. Although Boston has a population of nearly 800,000, twice as many people live in

some 40 surrounding cities and towns, most of which have fully paid fire departments, although a few of the smaller communities also have some paid-on-call firemen. Most of the fire departments in communities surrounding Boston are outstanding and several such as Arlington and Brookline have national reputations as their former chiefs served as IAFC presidents.

Ex-Chief Daniel Tierney of Arlington is Secretary-Treasurer of IAFC and was a pioneer in developing mutual aid. His brother, Richard Tierney, is now chief at Arlington.

The basis of much of the mutual aid is that fire alarm wire circuits from each community are extended to each neighboring department's fire alarm headquarters. Fire companies are assigned to first alarms, additional or multiple alarms, or to cover vacated stations just as though they belonged to the same community. When a box is received from the neighboring community, it is retransmitted with a preliminary signal indicating the city or town of origin. The local fire chief is always in charge at a fire regardless of how many outside companies are called in.

On the "South Shore" of Boston harbor the mutual aid system of some five fire departments is supplemented by a common radio network so that the operation of some 20 pumpers, 5 aerials, 1 squad, and 3 squads or rescue units can be coordinated. The figures shown on the map do not include numerous reserve and special duty units not ordinarily manned.

While the Boston Fire Department does not make the extensive use of mutual aid that is practiced by adjacent fire departments, there is one alarm panel at Boston fire alarm headquarters on which the alarms of surrounding departments are received. Boston alarms sound in the fire alarm offices of Chelsea, Everett, Somerville, Cambridge, Newton, Brookline, Milton, Dedham and Quincy.

When an alarm indicates that assigned Boston companies are wanted in these or other communities, Boston transmits an alarm beginning with the digits 8–2. If Boston desires outside companies, as when covering companies are wanted following a 5th alarm of fire, the appropriate departments are called by numbers in the 8–1 series.

Among the reasons why mutual aid is so successful in Massachusetts is that all fire officers take competitive examinations for promotion given by the State Civil Service Commission. Accordingly, while they are competing for local positions, their outlook is statewide. They are required to know state fire laws and regulations as well as purely local conditions. A board of fire chiefs prepared a civil service manual or "red book" used both as a guide for promotional examinations and for entrance examinations for candidates for the fire service. Thus all "fire fighters" (a term recognized by the State Legislature to designate firemen in Massachusetts) operate by the same book.

Massachusetts also has a very active fire chiefs club. The fire department instructors of the various cities and towns meet monthly in cooperation with the State Department of Education so that operation procedures of the various departments are well understood in adjacent communities.

Observe Fire Prevention Week
October 5-11, 1952

New Addition to Firemen's Home in Hudson, New York

MORE than 500 volunteer firemen and their guests recently gathered in Hudson, New York, to witness the dedication of the new addition to the hospital at the Firemen's Home in that city. The dedication marked another step in the expansion of the Home's facilities which were begun in 1888. In that year the Firemen's Association of the State of New York held their 16th Annual Convention in Cortland and began working for the establishment of the Home.

Three years later the New York State Legislature, by a special act, transferred title from the State to the original 30-acre site for $300. In 1892 the cornerstone of the original building was laid. By 1894 the Firemen's Home was open for inspection and members were admitted during the following year.

In 1901 a laundry building was added, then three years later 153 acres of land were purchased for farming activities. A boiler house was erected during this same year, then in 1905 the first 3-story dormitory, the Administration building and the main kitchen were erected. Another 3-story addition was made in 1917. The Memorial Hospital was dedicated on October 12, 1931.

New Booklet on Aircraft Crash Rescues

MANY fire departments will find valuable information in NFPA Aviation Bulletin No. 82 entitled "Aircraft Crash Rescue Problems," now available for distribution. It is based on a lecture given at the School for Rescue Squads, University of Maryland, by George H. Tryon, III. NFPA Assistant Technical Secretary and Secretary of the NFPA Aviation Committee.

The 16-page bulletin with 39 photographs, reviews aircraft accident experience for fire department analysis. It evaluates aircraft design, severity of impact, and fire control and extinguishment as the principal factors affecting rescue opportunities for fire fighters at the scene of an aircraft crash. It describes crash and rescue experiences of 23 major aircraft accidents.

Of particular interest to fire fighters is the section covering fire control and extinguishment at the scene of a crash. A reference list is included for readers who desire greater detail on specific points. Copies of "Aircraft Crash Rescue Problems" may be obtained from the NFPA Executive Office for $1.50 per copy, with discounts for quantity purchases.

FIRES IN THE NEWS

(Left) Scranton, Penn., May 29. (*Photo by Phil Butler, Scranton Times*) Fire starting in the basement of a restaurant spread rapidly and involved two hotels and several other buildings. A total of 15 fire companies responded to alarms. Two explosions helped to spread the fire, and more than 17 firemen were injured seriously enough for hospitalization. Estimated damage was in the vicinity of $1,000,000.

(Above) St. Urbain, Quebec, June 13. (*Gazette Photo Service.*) A gallon of paint left on a heating stove in a private home was held to be the cause of this conflagration that destroyed 52 homes and commercial buildings and left approximately 350 persons homeless. This was the fourth conflagration in eastern Quebec within the last 25 months. Fire fighters and Army personnel fought for more than 6 hours before the fire could be brought under control. Estimated damage was in the vicinity of $500,000.

Witco Chemical Company, Chicago, Ill., June 12. (*United Press Telephoto.*) An estimated $500,000 damage was caused by this "5–11" alarm fire that destroyed a T-shaped warehouse containing flammable chemicals. Fire fighters were hampered by low water pressure and extensive stretches of hose lines. They confined most of their efforts to protecting close exposures and 4 large tanks containing an asphalt solution.

Fire Appliance Company, Boston, Mass., June 10 (*United Press Photo.*) This unsprinklered 5-story building with joist and plank floors and open stair shafts contained a large stock of new and used fire equipment. Fire started among paraffin paper wrappings and spread rapidly through the 4th and 5th floors and roof. A total of 16 engine companies, 6 ladder companies, 2 fire boats, tower, light, and rescue units responded to 4 alarms. Total damage was estimated at $40,000.

Oil Warehouses, Odessa, Texas, May 21. (*Photos by Schoopman's.*) These 4 photos show action at a fire that resulted when 8 tank cars with casinghead gasoline loosened from an engine on a siding, came down grade into railroad yards, crashed into a switch engine and derailed in a warehouse district. Five of the cars piled against 2 warehouses and 2 cars exploded. Fire fighters from the Odessa Fire Department used water fog to cool the tanks and to protect exposures. After 4 hours of fire fighting, they managed to save 25,000 gallons of the 40,000 gallons that were contained in the cars, in addition to protecting a considerable quantity of oil, grease, and solvents stored in the warehouses. Damage was estimated at $30,000.

The Newark Township, Ohio, Fire Department

By Secretary R. M. Wilson

In a recent letter to FIREMEN, Secretary R. M. Wilson, of the Newark Township, Ohio, Fire Department, outlined some of the problems and achievements of that department during its short period of existence. Readers of FIREMEN have expressed interest in such information because it is helpful to members of small departments and departments in rural areas who are undergoing similar "growing pains" of organization and training. Secretary Wilson's article mentions an "advanced information system." This type of pre-planning is being put to good use in Ohio and was described in an article entitled "Making a Rural Fire Safety Survey" in the June, 1952, issue of FIREMEN.

IN JULY of 1950, the Newark Township Trustees were informed by the City Council of Newark, Ohio, that the old contract for fire protection for Newark Township could not be renewed and that any future contract would be for a much higher amount. This information called for repeated meetings between the City Council and our Trustees, but they were unable to come to an agreeable amount. During one of these meetings, one of our trustees stated that for $12,000 per year (the final figure quoted by the city fathers), Newark Township could have its own department.

This remark seemed to set off a chain reaction among Township residents that their own fire department was the best thing after all. At the election in November, 1950, the voters were asked to vote on a 3 mill, 2 year levy for the building and equipping of two firehouses. This levy passed by a large majority and the Newark Township Volunteer Fire Department was born.

In February of 1951, the trustees placed an order for the first truck. On March 7, 1951, a meeting of all men interested was called to see what could be done to organize a program for regular fire training. It was decided to start right away with a First Aid course in order to get acquainted and to keep the group intact. Approximately 40 men started the Standard First Aid Course, and 33 completed it. There still remained time for the Advanced Course, so the group entered into that program and 22 completed it.

In the meantime, the contract had been let for the first engine house and it was well on its way to completion. Also, during this time, after visiting many neighborhood rural departments, we saw that a water tank truck could be a valuable asset. We prevailed upon the trustees to purchase a second-hand 1947 cab-over-engine Ford chassis for that purpose.

The siren was obtained from a local funeral director, and neighboring garagemen and businessmen were very helpful in donating material and labor to help complete the job. The men worked on this project on evenings and Sundays during the summer and continued the charting of our rural areas and the First Aid Courses.

We started our fire-fighters course in August of 1951, under Chief W. J. Lauter, State Fire-Fighting Instructor of the State Department of Education, Division of Vocational Education. Forty members of the department completed this training course.

We received our new pumper on September 1, 1951, and began at once using it in our training. It was temporarily garaged until late October when the new firehouse was ready. Our outside training was really crowded into a few short weeks and our training classes on Wednesday evenings lasted until ten and eleven o'clock with the use of our light plant and flood lights.

Newark Township's Fire Station No. 1 has sufficient space for three pieces of apparatus. Shown above is the Department's 1300 gpm tanker which was built by members and the 500 gpm pumper on a 1951 Ford F-7 chassis. A "last-minute-letter" from Secretary Wilson states that a second fire station has been completed and already has a permanent complement of officers.

THE alarm system, designed by one of our own men, is working very well. A separate fire telephone line goes into the County Sheriff's Office downtown where a man is on duty 24 hours a day. Between the sheriff's office and the firehouse, we have a direct telephone line, over which the alarm is sounded by a switch. A transmission phone system operates on the same line.

Upon receiving a fire call, the man on duty throws the switch setting off the siren, and awaits answer on the other end. When the call is answered in the firehouse, over the transmission phone, it causes a needle on a voltmeter to drop down showing someone has answered the phone. The call is transmitted over the phone, and the siren is shut off. If the man answering the call feels that the siren has not run sufficient time to arouse the men, he starts the siren through a series of occilations by pulling the alarm on the outside of the building, near the entrance door. At the same time that the siren starts, a bright mercury vapor light mounted on the siren tower lights the area for men answering the call. The fire call is then posted on a blackboard showing location, type of fire, number of men leaving on pumper, and time of alarm.

Our tank truck is almost completed, but a few minor things remain to be done. It has a 1300 gallon tank, which we keep filled to about 1000 gallons most of the time, but we would utilize 1300 gallons for relay work.

It has a steel trough on each side in which we carry 150 feet of 2½-in. hose, 100 feet of 1½-in. hose and two 1½-in nozzles. It also carries a portable pump, gated wye, double male and double female connections, hydrant and spanner wrenches, pike pole, brooms and

shovels. We have two-way radio hook-up with the local sheriff and police department frequency, with a radio on the tanker and one on the pumper.

WE ARE a member of the Licking County Firemens Association, which includes mutual aid between all departments, including the City of Newark. We have already put the tanker to good use on mutual aid. We were called to help the neighboring Granville Department on a bad barn fire, and by use of the portable pump, and two 1½-in. hose lines were successful in cutting the fire off and preventing it from spreading to the house.

Our pumper is an American Fire Apparatus job, mounted on a 1951 Ford F-7, with a 500 gpm front mount pump. It carries 1000 feet of 2½-in. hose, 300 feet of 1½-in. hose, one 35-foot aluminum extension ladder and a 14-foot aluminum roof ladder, 2 back-pack pumps and a CO_2 extinguisher, and 2 booster reels, with 150 feet of booster hose on each. Another added feature on our pumper is a main switch for our battery system, designed by our Chief. Two batteries on the pumper are wired into a big knife switch on the cab. All running lights are left on, along with the ignition and radio and all the driver has to do is throw the switch to either battery and step on the starter. Another helpful feature is a buzzer mounted on the rear of the pumper that sounds in the cab. This buzzer is used only to signal the driver to stop, either because he has taken the wrong route or because someone is in trouble on the rear of the truck. We also carry on the pumper a 1000 watt light plant, two 500 watt flood lights, a portable pump, 2 all purpose gas masks, a few coats and boots, clean-up equipment, 200 feet of rope, and a heavy tarpaulin which snaps down to completely cover our 1½ and 2½-in. hose.

Our firehouse is 61 x 44 feet in area, with room for two trucks to leave by the two front doors, and room for a future squad car to park crosswise behind the other two. It also contains a shop, meeting room, lavatories, heater room, kitchen, and office for the Township Trustees.

We secured sufficient glass wool from a local plant and insulated the roof. This building cost about $25,000 and construction will soon start on a similar building in the other section of the township which will house our second pumper, a future water tank truck and squad car. Twelve men from that area have been taking training, and will form the nucleus of a department for that engine house. Temporarily, the new pumper will be housed in the Assistant Chief's garage, but will be put into service at once.

The second station will be hooked into the same alarm system also, after which we will install an automatic clock system to test the sirens every day.

Another problem that our widespread area presents is in our alarm system. It isn't possible for all the men to hear the sirens, so after giving the fire call to the first fireman who answers the call, the sheriff calls the home of our chief, or one of three alternates and gives the information to the one who answers. He or she then call two men, they leave, and their wives call two more and so on. On our first fire, this system was timed, and within 20 minutes after this relay started, 25 men from all over the township had arrived. We have a separate daytime schedule, worked out so that most available men are called first and the remainder if it is a major fire. All men are permitted by their employers to leave at any time that it is necessary.

GETTING back to our history, we went into service on December 19, 1951 in order to afford our township better protection over the holidays. For that period we ran double with the City of Newark and the cooperation was exceptional. It is really wonderful to see the spirit shown between their paid department and our volunteer department. We completed our firefighters course and received our cards on February 20th at ceremonies in our firehouse, which was attended by representatives from all the local industrial departments, 10 county departments, and various departments around Columbus which is 30 miles away.

Our Advanced Information System was started last summer. We divided our township into sections, each man taking a section to map and chart. He would call on each rural home, map the layout of building and outbuildings, showing water supply, approach hazards and all other useful information.

This data was taken down roughly, of course, then with the aid of some of the ladies of our auxiliary, the information was typed on the front of the sheet, and the men transferred the layout map on the back. Due to the fact that most fires are reported by location, these sheets are filed alphabetically in three ring binders according to location. In case a fire is reported on Cedar Street, the driver takes the book containing the A B C streets and roads and takes it in the truck, and the officer with him will check over the advanced information on the way to the fire. These books are kept on a shelf right next to the alarm phone. A program will soon get under way to duplicate this information so that each engine house will have a complete set. We have also divided our township in sections — 10 across, and 10 down, to further speed up the location of fires. Each man has one of these maps in his home or car, and we have a large copy of it in the engine house. There is also a copy of this map on the wall in the sheriff's office, right above our alarm system, so that he can pinpoint the location of a fire both by street number, and by Section Number. After a short period of study, you can tell the approximate location of a fire without looking at the map. On the map in our engine house we have also spotted all hydrants, water tanks, creeks, and other valuable information. We have added new roads and streets otherwise uncharted on township maps.

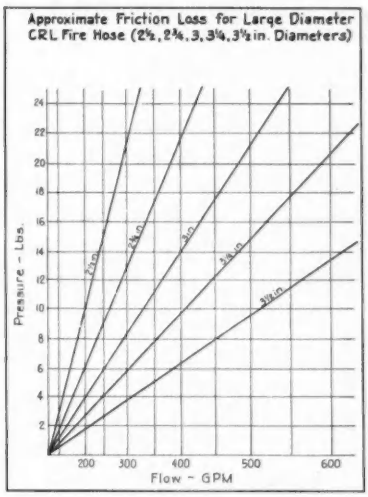
To show how the personal contact of calling on people to chart their farms promotes good will, we obtained a 1-mill operating levy at the last election, because our original 3-mill levy could not be spent for operating expenses, and it passed by a wide majority. This levy, which will run for five years before we need ask for a renewal, will operate both departments and leave ample funds left over to lay away for replacement of equipment. Out of this operating money, each man receives $1.00 per year in order to protect him by State Compensation. We have also received a lot of favorable newspaper publicity in the local newspaper. Approximately 38 newspaper articles have appeared in the last year, which are being kept as part of a historical scrap book for the department.

More About Hose Sizes

WITH some notable exceptions (previously reported in FIREMEN) most American fire departments have stuck tenaciously to using the hose sizes handed down from the days of horse-drawn fire apparatus. In keeping with progress, more powerful pumps and motors have been developed to force water through the relatively small conductors currently available. These, in turn, had to be made stiff and cumbersome to withstand the high pressures needed to overcome the high friction losses due to the inadequate internal diameter of the hose itself. Adequate nozzle pressures, even on heavy streams, do not require excessive pump pressures. The friction loss in 2½-in. fire hose is the true culprit where large streams are needed.

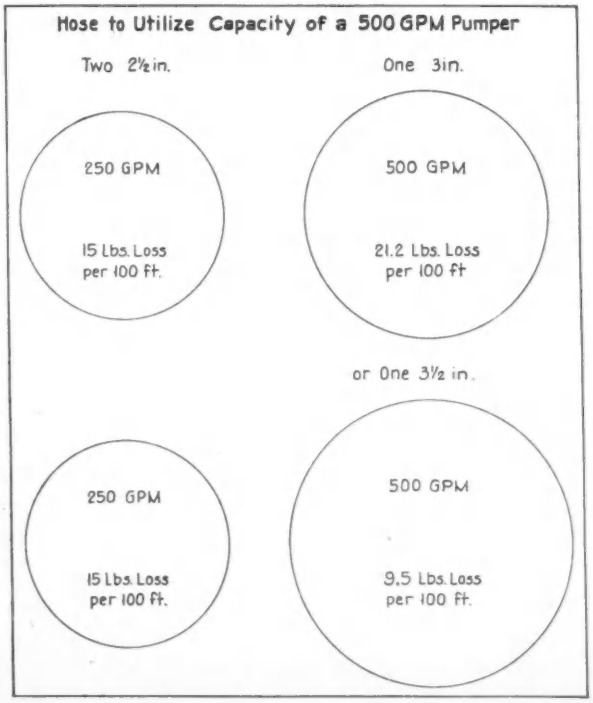
Tests made by the NFPA Fire Services Department indicate that if the American fire service would develop and adopt a light-weight and flexible, double-jacketed, rubber-lined fire hose like the 3½-in. hose already available in Great Britain, it would be possible to move the full capacity of a 500 gpm pumper through a single line of fire hose, using only moderate pressures. After all, the area of a 3½-in. circle is substantially twice that of a 2½-in. circle. This means that approximately the same quantity of water can flow through 3½-in. hose at half of the velocity necessary in 2½-in. hose, or twice as much can flow at the same velocity.

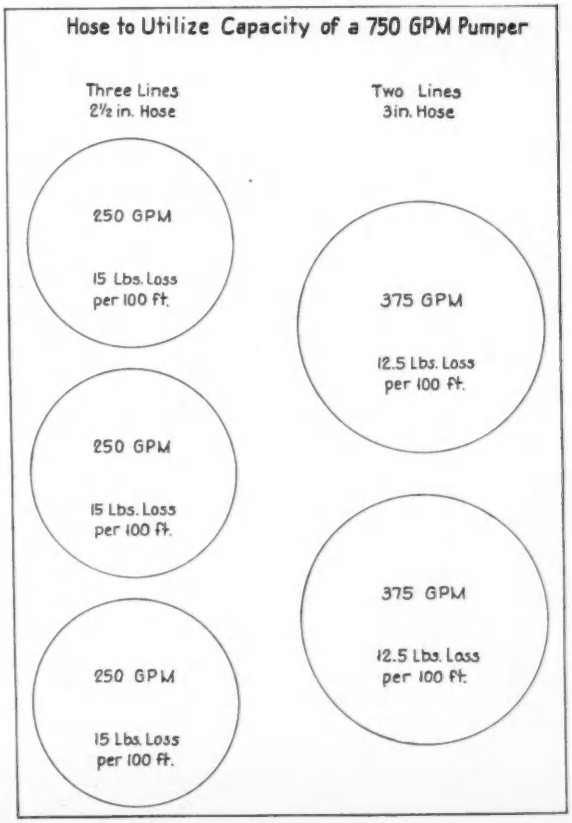
It would seem that what is most desirable in fire hose to service American pumping engine capacities is a light-weight flexible hose of about 3¼-in. internal diameter, designed to withstand field pressures of at least 200 lbs. per square inch and carrying 400 gpm at 10 lbs. loss per 100 ft., and 500 gpm at 15 lbs. loss. Thus a single line would carry the full output of a 500 gpm pumper working at capacity a distance of 1,000 ft. and two lines would take the capacity of a 1,000 gpm pumper the same distance. The same size of hose would move 350 to 400 gpm even greater distances and would efficiently utilize the output of pumpers operating in series or pressure position.


Approximate Friction Loss for Large Diameter CRL Fire Hose (2½, 2¾, 3, 3¼, 3½ in. Diameters)
Pressure - Lbs.
Flow - GPM
2½ in.
2¾ in.
3 in.
3¼ in.
3½ in.

Why build bigger pumps and motors and utilize more costly and harder-to-handle high pressure hose when larger diameter hose can do a better job with smaller, less costly pumping equipment?

As drawings below and at right illustrate, full capacity of pumpers is better utilized through larger size hose. Smaller circles at left of each drawing represent number of 2½-in. hose lines needed to utilize capacity of pumpers, while larger circles show volume that may be obtained with 3-in. and 3½-in. hose lines.


Hose to Utilize Capacity of a 500 GPM Pumper
Two 2½ in.
One 3in.
250 GPM
15 Lbs. Loss per 100 ft.
500 GPM
21.2 Lbs. Loss per 100 ft
or One 3½ in.
250 GPM
15 Lbs. Loss per 100 ft.
500 GPM
9.5 Lbs. Loss per 100 ft.


Hose to Utilize Capacity of a 750 GPM Pumper
Three Lines 2½ in. Hose
Two Lines 3in. Hose
250 GPM
15 Lbs. Loss per 100 ft.
250 GPM
15 Lbs. Loss per 100 ft.
250 GPM
15 Lbs. Loss per 100 ft.
375 GPM
12.5 Lbs. Loss per 100 ft.
375 GPM
12.5 Lbs. Loss per 100 ft.

Sidelights on Municipal Fire Protection

By Herbert R. Bogardus, Superintendent, Engineering Department,
Schedule Rating Office of New Jersey

From an address before the 56th NFPA Annual Meeting, Hotel Statler, New York City, June 10, 1952

SOME of you who may have looked at the title in the program, "Sidelights on Municipal Fire Protection" may well have wondered what I was to talk about. Quite unexpectedly Chief Thomas gave me a cue, even after I had prepared a few remarks this morning. In effect he has said to fire protection engineers and those in the related field, "Get down to earth. Do not consider your job well done when you have prepared, quoted and distributed the standards of the NFPA. There is a job that goes far beyond that one."

I, for one, would like to accept a little of that responsibility, to get down to the standpoint of the taxpayer who pays the bill and to the standpoint of the municipal planner who must do a good job for his municipality before residential developments get out of hand, and before plants and other hazardous occupancies develop and present problems in municipal fire protection.

Some of you may wonder whether or not I am a little bit off base in going into the matters of municipal taxation and the matters of local planning of municipalities as a fire protection engineer. I have come to realize in recent years that if we have "missed the boat" it has been in these particular fields.

The past twenty years has shown a growth in population of this country of approximately 22 per cent. Unfortunately this growth has been concentrated largely in communities already existing. The "growth of 22 per cent in population" is misleading because some of our small communities have grown five and six hundred per cent in that same period. Those twenty years also represent eight or ten years of depression times, five or six years of wartime, and the balance a period of excessively high prices.

None of these features have been conducive to the obtaining of the best in fire protection because that costs money. We therefore find ourselves in a position of being forced to accept a much broader concept of this problem than the matter of promoting certain standards.

Herbert R. Bogardus delivers an address to the 56th NFPA Annual Meeting during the municipal and rural fire protection session.

WE HAVE an educational job to do. In my own state I am repeatedly reminded of some of these problems. There are towns that had only 3,000 population in 1930 that have now grown to 18,000 or 20,000 population. Some of the water systems were designed originally for a fire flow of 1500 gallons per minute for a period of four or five hours, which was at that time adequate. As the towns grew the water systems were extended, many times with little regard for adequacy.

With the period of competitive housing, "hundred per cent financing," and the great demand for homes the small town with maybe a thousand homes all at once grew to two thousand homes or three thousand homes. And yet, somewhere along the line, there has been a failure to recognize that a 1930 residential tax bill of $150 per year could not be continued. We could not have one hundred or two hundred per cent increase in the number of homes and still carry the same tax bill because such growth unbalances our municipal financial structure. We now have a predominance of revenue derived from dwellings alone, because in many cases they have over-balanced the other sources of municipal income such as franchise taxes and industrial taxes. Therefore that is a problem of municipal planning. We perhaps must reappraise our thinking of municipal growth and progress.

WHAT is a small town that grows up? Is it a town that becomes financially embarrassed? Is it a town whose fire protection suffers by reason of a very urgent need for educational facilities, sanitary systems, roads, and other improvements?

Let's think of a municipality as a complete unit and assign or assess its needs on a given basis, then limit its development to a preconceived plan which does not embarrass us financially and fire-protective-wise.

I am not unappreciative of many of the problems now facing municipal planners. But we see a growing trend of industries moving into outlying areas. We see a similar population trend. This movement has a tendency to hold city populations static, or even reduce them, which in the case of larger cities increases the municipal taxation burden.

There are also many cases of industrial plants which have moved into cities and required fire protection and water supply facilities entirely beyond that for which the water systems were designed originally.

Similarly we have permitted the growth of industrial and processing plants which have contributed heavily to the municipal support, but have overburdened the municipal resources for water supply and fire defense facilities. I think we should appraise these situations before they become too acute.

I am thinking of a particular problem now which faces many small communities with extensive residential developments, and "super-duper" markets and shopping centers. I saw one the other day. It had 98,000 square feet of

(*Please turn to page 34*)

Rescue Equipment of Columbus, Ohio Fire Department

MORE and more fire departments are organizing and operating rescue squads. Up to the present time, there has been no detailed standard list of equipment for such units as the needs vary from one community to another. However, it has been suggested that FIREMEN Magazine might well publish lists of emergency equipment carried on typical rescue units.

In many departments rescue units are of two types: a heavy-duty unit with a large truck and a large inventory of special equipment not ordinarily carried on engine and ladder companies; or an ambulance or inhalator squad unit carrying a smaller assortment of emergency equipment and usually having two or three men.

Below are lists of equipment for both of these types of units as operated by the Columbus, Ohio, Fire Department and published in a recent News Letter of the Ohio State Fire Marshal's Department.

Equipment on Fire and Heavy Rescue Squad

1 — 220 oxygen bottle with 2 adapters and wrenches.
1 — extra bottle of acetylene.
4 — Scott Air-Paks.
2 — cutting torches (1 portable).

2 — power generators (1250 and 2500 watts).
4 — 500 watt lights.
2 — 250 watt lights.
8 — 100-ft. light cords.
2 — 250-ft. light cords.
4 — house current adapters.
1 — 10-in. power saw.
1 — ½-in. electric drill and bits.
1 — 3-gallon safety gasoline can.

1 — foam generator.
1 — play pipe and 2 tips.
3 — cans powder foam.
4 — cans liquid foam.
2 — cans foam.
2 — 1½-in. foam pickup nozzles and hose.
2 — 2½-gallon foam fire extinguishers.
1 — CO_2 extinguisher.
1 — carbon tetrachloride extinguisher.
1 — 1½-in. LaFrance nozzle.
1 — 1½-in. Rockwood nozzle (Spear adapter).
1 — 1½-in. regular nozzle.
1 — 1-in. plaster nozzle.

3 — Navy helmets.
8 — all service cannister masks.
4 — life belts.
1 — ammonia suit.
4 — pairs rubber gloves (linemen).
3 — pairs leather gloves.
3 — pairs asbestos gloves.
2 — asbestos suits.
1 — rubber body wrapper.

20 — salvage covers.
2 — canvas water troughs.
2 — debris bags.
2 — floor drains.
4 — ceiling drains.

2 — street car jacks.
3 — ditch jacks.
1 — chain hoist.
2 — hydraulic jacks.
1 — 50-ft. steel cable and pulley.

2 — brooms and 2 mops.
1 — 6-ft. pike pole.
2 — Hux bars.
1 — hydrant wrench.
1 — 10-ft. section 2½-in. hose.
1 — 4-in. to 2½-in. hydrant reducer.
2 — claw hammers.
1 — sledge hammer.
1 — 14-in. pipe wrench.
1 — double edge saw.
1 — hack saw and blades.
1 — file.
1 — pair tin snips.
1 — large screw driver.
3 — red emergency reflectors.
1 — 2-in. auger.
1 — pair long handled wire cutters.
2 — 10-ft. pike poles.

1 — kit small tools.
1 — fire axe.
1 — coal pick.
1 — gas shut-off key and handle.
1 — crow bar and a wrecking bar.
1 — pair bolt cutters.
2 — scoop shovels.
2 — sand shovels.
1 — 10-ft. folding ladder.
1 — telephone head set.
7 — ⅜-in. ropes.
1 — water thief and hose.
1 — hose roller (small).
1 — set of sprinkler heads and wrench.
4 — life belts.
3 — fusees.
1 — rescue harness.
2 — sets trench tools.

Inhalator Emergency Squad

First Aid Equipment

Doctor's kit. (First aid supplies, sterile gloves, stethescope, etc.).

Rubber sheets, restraining belts, sterile sheets, obstetrical instruments, extra first aid supplies (large amount), splints (traction, arm and blanket types), 20 blankets, burn kit (first aid equipment for burns).

Respiratory Equipment

E & J resuscitators (2 extra bottles).

H & H inhalator (7 extra bottles) and 50-ft. extension.

1 — 4-outlet oxygen manifold therapy unit with a 110 bottle of oxygen and 4 complete mask assemblies.
1 — all-purpose cannister mask for each man assigned to squad.
1 — MSA oxygen mask (½ hour capacity).

Rescue Equipment

Wold lamp (gas detector), carbon monoxide detector.

Web belts (various sizes), restraining belts (various sizes).

Flashlights, fusees (5-minute and 15-minute), sand bags.

Backboards, stretchers, 30-ton jack and handle.

Lyle gun, Rogers hose hook, portable cutting torch.

Ropes (¾-in., ½-in., and ⅜-in.), bolt cutters (large and small).

Axe, sledge hammers, Hux bar, crow bar, tin cutters, double edge saw, hack saw, wrecking bars, chain hoist, asbestos blankets, miscellaneous tools.

Miscellaneous Equipment

Mechanic's tools, refrigerator tools, ring cutter, accident and industrial reports, extension cord, Kleenex, carbon tetrachloride extinguishers, foot rest for backboard, shovels, battery-powered light, telephone and keys (for fire alarm box).

"Yes, Mayor, the Chief did mention the money allotted to the fire department — in a sort of unmentionable way —."

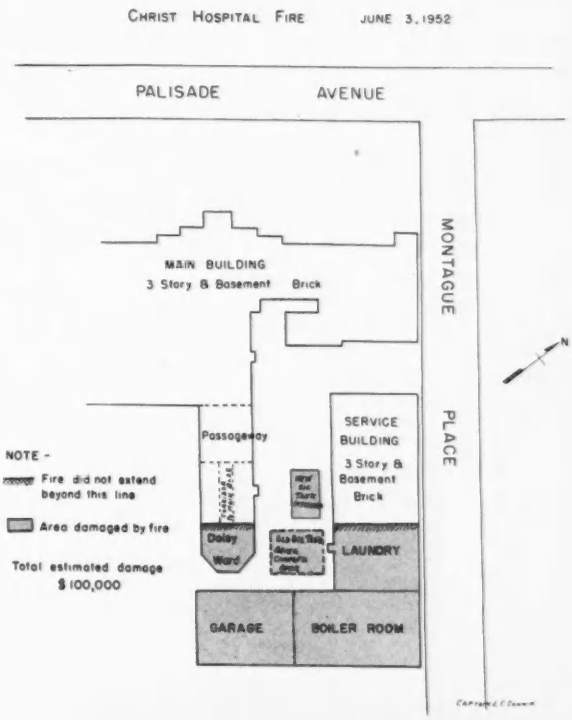
Good Stop at Jersey City, N. J., Hospital Fire

CHIEF Thomas J. Maloney of the Jersey City, New Jersey, Fire Department, recently forwarded the pictures and diagram on this page to the NFPA Fire Record Department as part of a report on an explosion and fire that involved the Christ Hospital in that city on June 3.

Early in the afternoon of that day a workman was using an acetylene torch to remove reinforcing rods in concrete that covered a 10,000-gallon fuel oil tank that was to be removed for installation of a new tank. The torch was applied to a steel connecting rod that ran along the top side of the tank and an explosion occurred causing the fuel oil feed line to rupture, flooding the entire basement of a nearby furnace room with 3 to 4 feet of fuel oil. A flash fire spread rapidly to the garage, employee's dormitory and sun porch of the nearby children's ward of the hospital.

The explosion set off a fire alarm in the hospital and a street box alarm was also sent by a passerby. Immediate response by the fire department was an important factor in the confinement of the fire. A total of 13 engine companies, 7 ladder companies, and a special company were used.

Fire fighters used seventeen 2½-in. lines and a 1½-in. line. Low velocity fog nozzles were used for the extinguishment of fire in the tank area. Hose stretching became a problem since the lines had to be brought through the front of the hospital to the courtyard in the rear. A steep rocky cliff in the rear of the hospital prevented ladder and hose work from that side. A fire wall between the children's ward and the main building and quick action by fire fighters prevented the spread of fire from the involved section. Four fire fighters were injured but rescue of the patients was completed successfully.



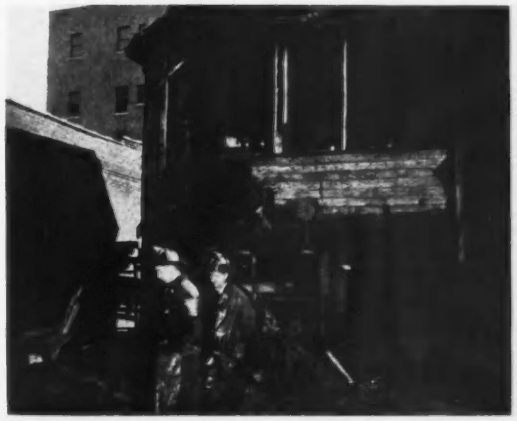
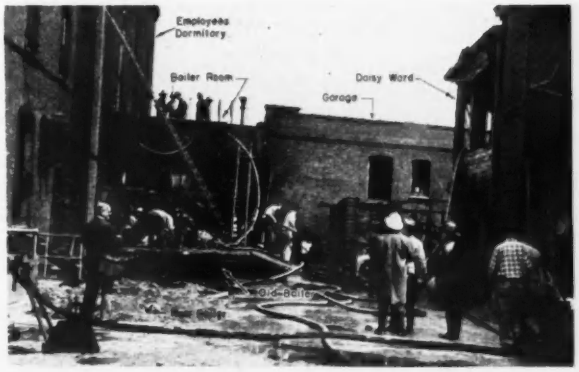
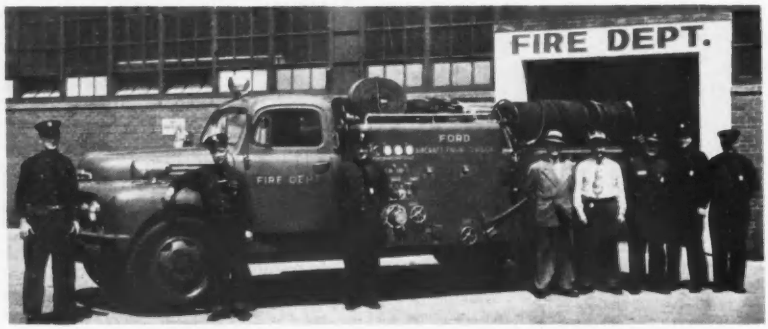


Diagram at upper right shows layout of courtyard and area involved by fire. The drawing was prepared by Captain L. C. Connin of the Jersey City Fire Department as part of the report. Picture below shows mopping-up operations in courtyard. In the left center of this picture fire fighters may be seen working on the old tank where the explosion and fire occurred. Note the close proximity of the "Daisy Ward" which was the children's ward, and the boiler room which was flooded with fuel oil. Top picture at right shows damage caused to the children's ward which was in a 2-story brick and wood joisted building. Bottom picture at right shows fire fighters inspecting the acetylene torch and fuel oil feed line near the old oil tank where the fire started.



Industrial Fire Protection



Fire Department of Ford Aircraft Engine Division, Chicago, Ill.

FIRE department personnel of this plant are responsible for the protection of 19 buildings with a combined floor area of 6½ million square feet. There are 40 regular members in the department, including Chief E. W. Johanson, a captain, lieutenants, an inspector, and an instructor. There are also 400 volunteer fire brigade members who receive continuous systematic training in fire fighting and fire prevention.

Apparatus consists of a Cardox truck with a Ford F-8 chassis and a Darley 3-stage combination pump, a 500-gallon water tank, 50 gallons of mechanical foam, and a 750 lb. low pressure Cardox unit.

There is also a chief's sedan and an auxiliary truck on a Ford F-1 chassis with a 300-lb. Ansul truck mount, smoke ejectors, light generators, rescue equipment and hand extinguishers. Used as supplementary apparatus are a jeep with miscellaneous extinguishers and hand equipment, two 500 gpm trailer pumpers, and a foam generator trailer.

Fire Brigade of the Crown Cork and Seal Company

SHOWN above is a fire truck that has been built and equipped by members of the fire protection force of the Crown Cork and Seal Company, Baltimore, Maryland. This group of 18 members operates "round the clock" seven days a week. Duties of the members are to provide fire protection during all welding and burning jobs, to inspect and maintain about ninety sprinkler systems, 2500 first aid extinguishers, 57 completely equipped hose houses with 20,000 feet of fire hose, and all other activities essential to plant fire protection.

In September, 1951, a plant fire brigade of 50 members was organized, consisting of employees selected from various departments throughout the plant. Classes in fire fighting are conducted for this group once each week.

All members have passed the Fire Brigade Training Course held at the University of Maryland and have also taken the Red Cross First Aid Course.

Revised NFPA Standards Now Available

TECHNICAL committee action at the recent 56th NFPA Annual Meeting in New York City made possible the publication of a number of NFPA standards that were acted upon. From time to time these standards will be announced in FIREMEN as they become available. Copies may be obtained from the NFPA Executive Office, 60 Batterymarch Street, Boston 10, Massachusetts.

Discounts may be obtained for quantity purchases of all the standards listed below.

NFPA No. 34 — Standards for Dip Tanks Containing Flammable or Combustible Liquids applies to operations in which articles or materials are passed through contents of tanks, vats or containers of combustible liquids including coating, finishing, treating and similar processes. 22 pages. Price: twenty-five cents.

NFPA No. 48 — Standards for Magnesium, calls attention to the fire and explosion hazard in storage, handling, and processing of magnesium and magnesium alloys. It covers magnesium foundries, magnesium processing plants, and commercial storage of magnesium. 16 pages. Price: twenty-five cents.

NFPA No. 78 — Code for Protection Against Lightning supersedes the edition of 1951 and all prior editions. It incorporates revisions recommended by the NFPA Committee on Protection Against Lightning and adopted at the recent Annual Meeting. 46 pages. Price: fifty cents.

NFPA No. 90 — Standards for Air Conditioning Systems presents the standards for the installation of air conditioning, warm air heating, air cooling, and ventilating systems. 32 pages. Price: thirty-five cents.

NFPA No. 303 — Fire Protection of Boatyards & Marinas contains recommendations prepared by the Committee on Motor Craft and Marinas, endorsed by the General Committee on Marine Fire Protection and adopted by the NFPA. The new edition contains minor amendments adopted this year. 27 pages. Price: twenty-five cents.

NFPA No. 505 B, C — Standards for the Maintenance and Safe

Operation of Industrial Trucks presents standards adopted by the NFPA Committee on Industrial Tractors and Lift Trucks at the 56th Annual Meeting. 10 pages. Price: twenty-five cents.

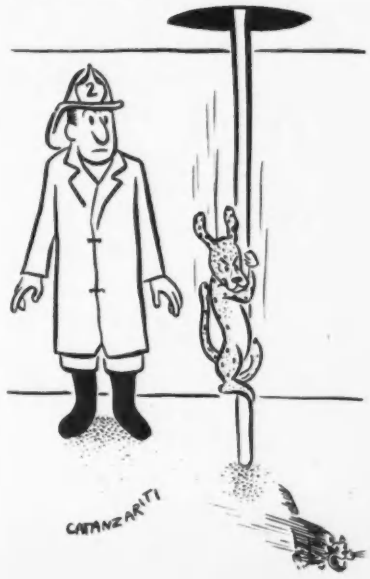
NFPA No. 657 — Code for the Prevention of Dust Explosions in Confectionery Manufacturing Plants has three principal objectives: to prevent dust explosions, to set forth principles which, if used, will minimize the resulting damage, and to present standards for minimizing fire hazards. 10 pages. Price: twenty-five cents.

NFPA No. 512 — Truck Fire Protection, Recommended Good Practices, contains recommendations of the NFPA Committee on Truck Transportation as adopted at the 56th Annual Meeting. 14 pages. Price: twenty-five cents.

NFPA No. 101, ASA A9.1 — Building Exits Code. This Twelfth Edition of the Building Exits Code supersedes the Eleventh Edition of 1951. Revisions adopted include new recommendations acted upon by the NFPA Committee on Safety to Life. 136 pages. Price $1.00.

Membership

ANY industrial fire brigade is eligible to NFPA Membership. Thousands of industries hold one or many memberships in the Association. NFPA members can purchase any desired quantity of FIREMEN Magazine at the low cost of $1.25 per yearly subscription, in addition to regular membership dues.



Join the Parade to INDIAN

FIRE PUMPS and step out ahead in your fire prevention program!

INDIAN FIRE PUMPS use only clear water — no chemicals. Carrying straps are adjustable so that 5 gal. tank fits the back. It is air-conditioned so that no dampness touches the back.

Now is the time to be sure that you have an ample supply of INDIAN FIRE PUMPS to take care of any fire emergency that may arise. INDIANS are first choice of fire depts., forest rangers, lumbermen, etc. Don't take chances with fire — be prepared with INDIAN FIRE PUMPS.

Have You Ordered INDIAN FIRE PUMPS for Civil Defense?

D. B. SMITH & CO.
408 MAIN ST.
UTICA 2, N. Y.

PACIFIC COAST BRANCHES:

Hercules Equipment & Rubber Company, Inc.
435 Brannan Street
San Francisco 7, California

Fred E. Barnett Company
2005 S. E. 8th Ave.
Portland, Oregon

Titan Chain Saws, Inc.
2700 Fourth Avenue South
Seattle, Washington

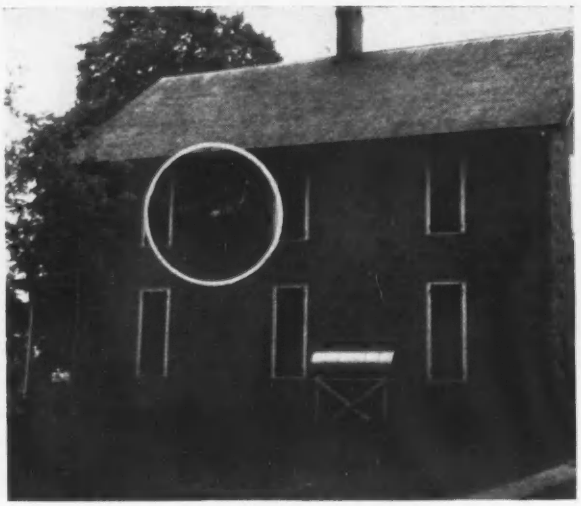
CANADIAN AGENTS:
Fleck Brothers, Limited
110 Alexander Street
Vancouver, B. C., Canada

Roy G. Davis Company
617 East Third Street
Los Angeles, California

Fred E. Barnett Company
600 Spring Street
Klamath Falls, Oregon

L. N. Curtis & Sons
426 W. Third Street South
Salt Lake City, Utah

C. E. Hickey & Sons, Ltd.
Hamilton, Canada



Dangerous Fuel Oil Installation

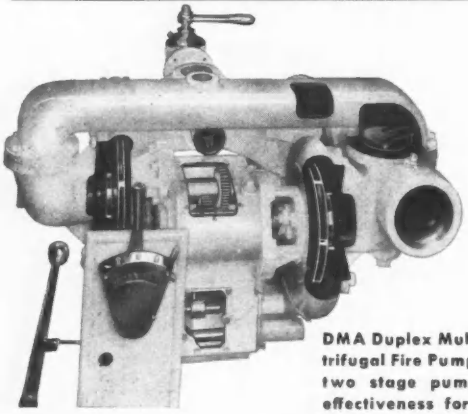
SOME fire hazards are brought into buildings by the occupants, but others apparently adhere to the building walls, as indicated by the above photograph. The oil drum fastened to the second story wall of this building in Wheatland, Iowa, apparently feeds an oil burning appliance by means of à copper tubing extending through the asphalt siding of the house. Immediately over the fuel tank is the wooden shingle roof. Thus we have the makings of a combined Class A and B fire. Get the fog nozzle ready, Wheatland! Incidentally, the man supplying the fuel must have long legs or arms.

How Do Your Hydrants Face?

THIS hydrant at Sterling, Illinois, apparently was installed more for the convenience of the canine population than for fire department service, judging by the position of the "steamer" connection which is so placed with relation to the adjacent tree as to appear almost worthless. This brings to mind the fact that some communities by ordinance give the fire chief authority to locate all fire hydrants for accessibility and for maximum value for coverage of property and for convenience of making hose layouts.

It seems incredible that waterworks employees could be so obtuse in placing a hydrant with the outlet so located, but we recall one U. S. Veterans' Hospital where almost all fire hydrants were set with the "steamer" outlet facing away from the driveways so as to render them virtually useless.

Undecided?



DMA Duplex Multistage Centrifugal Fire Pump—the only two stage pump with top effectiveness for every fire-fighting problem!

Cast your vote for QUALITY . . . on your next fire engine specify a BARTON-AMERICAN PUMP!

You can get definitely greater fire protection for your community when you specify Barton-American Fire Pumps. And that can be demonstrated to your satisfaction — with either midship or front mounted types.

Quality specifications are rigid on every unit built. All types meet all Underwriter's tests for standard capacities and pressures plus plenty of extra pressure for highly effective fog gun service!

Your Barton-American Representative can show you — not with generalities but specifically, feature-by-feature — why Barton-American Quality is worthy of your vote. Contact him today — or write for helpful, fact-packed bulletins as follows:

Bulletin 8733 on DMA Duplex Multistage Centrifugal Midship Pumps . . . Bulletin 8734 on DMB Duplex Four Stage Midship Pumps . . . or Bulletin 8330 on UA Gear Driven Front Mounted Pumps.

AMERICAN-MARSH PUMPS

BATTLE CREEK MICHIGAN

CANADIAN APPARATUS PLANT

American-Marsh Pumps (Canada) Ltd.
Stratford, Ontario, Canada

Dates to Remember

Kansas: The Annual Kansas Fire School will be presented by the University of Kansas and other cooperating agencies at Hutchinson, October 21–24.

Maryland: The Annual Short Course will be held on the campus of the University of Maryland at College Park, September 2–5.

Montana: The 13th Annual State Firemen's School will be held at Polson, August 27–30.

Nebraska: The Nebraska State Volunteer Firemen's Association will hold their 70th Annual Meeting at the Hotel Fort Kearney, Kearney, Nebraska, October 20–22. For information contact Russell D. Salak, Secretary-Treasurer, P.O. Box 312, Schuyler, Nebraska.

New Hampshire: The 1952 New Hampshire Fire School will be conducted by the New Hampshire Fire Chiefs' Association at Laconia, September 21 and 22.

New York: The 12th Annual Convention and Tournament of the Jefferson County Volunteer Firemen's Association will be held at Black River, September 11 and 12.

The 8th Annual Fire Chief's Drill School will be held at Old Forge, September 20 and 21.

Tennessee: The Tennessee State Fire Service School will be held at Murfreesboro, August 25–29. Write to Captain Homer S. Elkins, Itinerant Fire Department Instructor, Tennessee State Board for Vocational Education, Trade & Industrial Service, 215 Chestnut Street, Chattanooga, Tennessee.

Texas: A Texas Fireman's Training School will be held at Texas A & M College, College Station, August 24–29. Write to Colonel H. R. Brayton, Director, A & M College, College Station, Texas.

Virginia: The 1952 Virginia State Fire School will be held in Norfolk, September 8–12.

Washington: The Annual Conference of the Washington State Firemen's Association will be held in Yakima, August 20–23. For reservations write to Reservation Committee, care of Yakima Fire Department, Yakima, Washington.

Washington: The 21st Convention of the International Association of Fire Fighters will be held Auugst 11–15. Information on reservations may be obtained from the Seattle-Northwest Convention Committee of the I.A.F.F., c/o New Washington Hotel, Seattle.

Wisconsin: A Wisconsin State Fire School will be held at Madison, August 11–13. Write to J. J. Lichty, Assistant Director of Bureau of Community Development, Wisconsin University, 208 Extension Building, Madison, Wisconsin.

THIS IS ALL YOU NEED TO MAKE 5,000 GALLONS OF AIR FOAM and it costs less than 5 lengths of hose!

Now—without sacrificing hose space—you can carry adequate air foam equipment. *All you need* is one Pyrene* No. 3 Forcing Type Foam Maker and four 5 gallon cans of compound. Only Pyrene makes it possible to produce air foam in volume with such minimum equipment. And with Pyrene it's easy to get into action fast. All you have to do is couple the foam maker into the hose and insert the pick-up tube into the can of foam compound—it starts making foam immediately.

Plan right now to equip *at least one* of your units with Pyrene. Due to increased oil and gas deliveries, more and more flammable liquid fires are occurring every day. Write for name of the Pyrene jobber nearest you.

*T.M. Reg. U.S. Pat. Off.

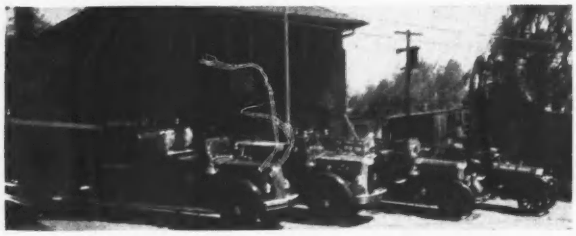
Pyrene AIR FOAM

PYRENE MANUFACTURING COMPANY

587 Belmont Avenue **Newark 8, New Jersey**

Affiliated with C-O-Two Fire Equipment Co.

NFPA Member Departments



Volunteer Fire Company of Willow Grove, Pennsylvania

SHOWN above are the fire station and apparatus of the Willow Grove, Pennsylvania, Volunteer Fire Company. (Left to right) A 1951 Mack "85" 750 gpm pumper; a 1948 Mack "75" ladder truck; a 1936 LaFrance 750 gpm pumper; and a 1925 LaFrance pumper which is used only as supplementary apparatus. Scott Air-Paks and an E & J resuscitator are carried on the trucks, together with complete first aid equipment.

A new addition to the fire station was built last year to house two fire trucks, a workshop, and additional recreational facilities.

The active crew, headed by Chief Clarence Kirk, consists of 65 men, including 6 "fire-police" specially trained to handle traffic and property protection in emergency areas. The company is in the 3rd District of Montgomery County and participates in a mutual assistance agreement with four other fire companies.

Chula Vista, California, Fire Station

THE Chula Vista, California, Fire Department is headed by Chief George S. Lee and Assistant Chief Louis W. Cook. There are 13 paid members, all appointed through Civil Service examinations. The department protects a community of 20,000 population and an area of 5½ square miles. Chula Vista's attractive fire station of Spanish design houses two 750 gpm Seagrave pumpers. Plans call for the purchase of a small tanker unit for fighting grass and brush fires.

Cordova Volunteer Fire Department Cordova, Alaska

THIS department protects a community of 2500 population and a number of cannery installations. Chief Richard S. Davis, Assistant Chief Don Shellborn, and Secretary Hugh R. Opperman head the department with a membership of fifty including 30 active fire fighters. The department has a pumper with a 400-gallon tank and another pumper mounted on a Chrysler chassis.

Arlington Fire Department Arlington, Texas

HEADED by Chief Mike Thompson, Assistant Chiefs Patrick Martin and F. M. Harris, President Virgil Jackson and Secretary Mason Lankford, this department of 32 active fire fighters protects the City of Arlington and rural areas. The department also serves all of Tarrant County as part of a mutual aid system with the County Volunteer Fire Fighters Association.

Apparatus consists of one 750 gpm and one 500 gpm American-LaFrance pumper, one 610-gallon tanker mounted on a Chevrolet chassis, a 410-gallon tank mounted on a Ford chassis, and another tank truck with a 200-gallon Hale pump. The department also plans to acquire another 750 gpm Class A pumper. The first-aid squad uses a 1950 Chevrolet 1-ton panel truck which carries lighting plant, resuscitator, gas masks, and other rescue equipment.

The department participates in the extension service training program of the Texas A. & M. College and also takes civil defense training under Captain Johnson of the Fort Worth Fire Department. Members attend the quarterly meetings of the North Texas Firemen's Association and yearly meetings of the Texas State Firemen's Association.

Warren Township Volunteer Fire Department Indianapolis, Indiana

CHIEF Warren D. Todd and Assistant Chiefs Alfred Crumbo and John Heckman head this department of 56 members. The department has a headquarters and one other station and protects a community of 7 square miles in area. Apparatus consists of 3 pumpers, including a newly-purchased 750 gpm pumper, a 2,000 tanker, and 3 fully equipped tank trucks. A trained rescue squad is completely equipped with masks, resuscitators, stretchers and other necessary equipment.

The department has a Ladies Auxiliary of 21 members and raises funds through social events. The Township supplies funds for maintenance of apparatus and equipment. All members belong to the Indiana Firemens Association and the Marion County Association.

Matewan Volunteer Fire Department Matewan, West Virginia

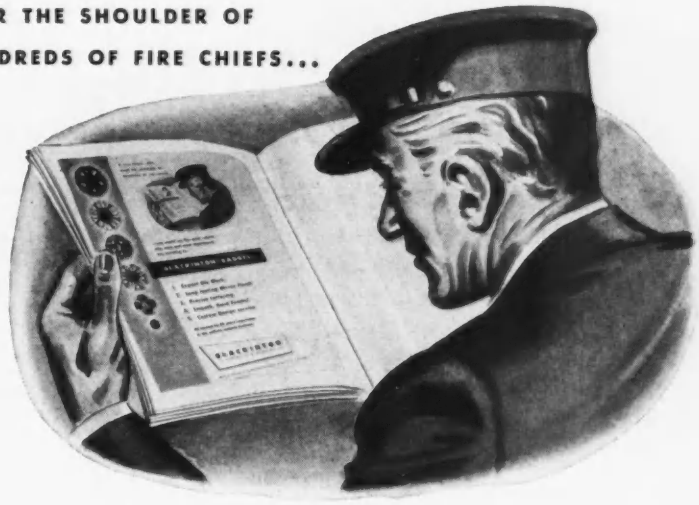
THIS department protects a community of 5,000 population, including the City of Matewan and surrounding areas. The 15 members are headed by Chief Frank Morrell, Assistant Chief Norman Caroll, and Secretary Dan Chambers, Jr.

The department has a 2-story concrete block fire station which houses on the first floor a Ward-LaFrance pumper, a ladder truck, a pumper built by members of the department, and a 500-gallon tanker with two auxiliary pumps.

ILLUSTRATIONS SHOWN ½ ACTUAL SIZE

Blackinton's popular Cap, Collar, and Lapel Insignia available in several finishes—all with colorful hard enamel centers. Ask your supplier to show you the complete line of BLACKINTON BADGES the next time he calls. Be sure to specify BLACKINTON BADGES.

IF YOU COULD LOOK OVER THE SHOULDER OF HUNDREDS OF FIRE CHIEFS...



—you would see five good reasons why more and more departments are switching to—

BLACKINTON BADGES

1. ***Expert Die Work***
2. ***Long Lasting Mirror Finish***
3. ***Precise Lettering***
4. ***Smooth, Hard Enamel***
5. ***Custom Design Service***

All backed by 100 years experience in the uniform insignia business.

BLACKINTON
V. H. BLACKINTON & CO., INC., ATTLEBORO FALLS, MASS.

Uniform suppliers are welcome to the BLACKINTON display at the I.A.F.C. Convention, Booth 51 — August 25-28.

SENSIBLE

FOR ALL YOUR HOSE CONNECTIONS

improved

SENSIBLE

LUG COUPLINGS

(ROCKER LUG TYPE)

insure

QUALITY *and* **SAFETY**

The improved Powhatan "Sensible-Lug Couplings" are precision tooled and manufactured of only the best high-grade materials. They set a standard that is "tops" in this specialized field of fire-fighting equipment. The curved surfaces of this modern coupling enable the hose to glide easily over all obstructions, thus preventing snagging, an important safety and economical feature appreciated by those who know.

SPECIFY "SENSIBLE" LUG COUPLINGS ON YOUR NEXT HOSE ORDER

POWHATAN BRASS *and* **IRON WORKS**

RANSON, WEST VIRGINIA

Phones 93 & 94 Charles Town, West Virginia

Established 1892

Ladder Loading

How many men does your department permit on an 85- or 100-ft. metal aerial ladder? In the past some departments have limited the number of men on wooden aerials to either 4 or 5. While metal aerials are presumed to be stronger, there is a tendency to place them at angles further from vertical, thus placing a greater strain on the ladder than was the practice with wooden aerials.

The metal aerial in this photo, taken at a Cincinnati fire, appears to be at about a 30 degree angle (⅓rd of the height away from the base of the building) to clear the wires. It is supported at the top of the building as is considered proper practice for metal aerials. The tips of wooden aerials are placed out from the building so as to be entirely supported from the base. The weight of men on the ladder will then bring it into position.

You bet I specify MIDWESTERN Protective Clothing ... my men deserve the BEST!

PROTECTION • COMFORT • SERVICE

There is no substitute for the extra protection, built-in comfort and longer wear you get by specifying Midwestern clothing. In our vast selection of rubber materials you will find the type of fabric exactly suited to your climate and needs. You can count on the softness and flexibility of the high-grade materials used to meet your most exacting requirements for lasting comfort and rugged service.

Due to government requirements for Midwestern Protective Clothing, prompt delivery will be assisted if you place your order early. For complete information, have your Midwestern dealer show you our full line. A letter to the factory will also bring you literature and material samples for your inspection.

MIDWESTERN MFG. CO., Mackinaw, Illinois

Manufacturers of the Famous **MACKINAW Coats**

Greenwich, Graduation

THE fire department of Greenwich, Conn., under Chief Stuart M. Potter, graduated 71 paid and volunteer firemen at its third annual graduation dinner held at the central fire station on June 11. Participating in the graduation exercises were Selectman Frank R. Parker; Police Chief John Gleason; Commissioner V. Hall Everson; Chief Henry Thomas of Hartford, Vice President of the International Association of Fire Chiefs; Assistant Chief Engineer George Swan, National Board of Fire Underwriters; Roi B. Woolley, Associate Editor *Fire Engineering;* and Warren Y. Kimball, Editor, NFPA FIREMEN.

The 8-week training course dealt with hydraulics, care and operation of apparatus, use of radio, handling various types of fires, salvage, fires involving electric railroad power lines, automatic sprinklers, forcible entry, ventilation, and natural gas.

COAST TO COAST

SEARS, ROEBUCK PROPERTIES

PROTECTED

Automatically

BY ADT

Sears' well-established reputation for high quality at low cost has been gained through astute purchasing and efficient operation. The same sound policy was applied in choosing electric protection service for the tremendous stocks of merchandise in Sears' properties throughout the country.

Like thousands of progressive business concerns, Sears found that appropriate combinations of ADT Automatic Protection Services give a higher degree of protection at lower cost.

Mail order houses, warehouses and larger stores from coast to coast are protected *automatically* by ADT to safeguard against fire, burglary and other hazards.

Automatic protection services for these establishments include: Sprinkler Supervisory and Waterflow Alarm; Aero Automatic Fire Alarm; Burglar Alarm; Automatic Heating and Industrial Process Supervision.

An ADT representative will show you how these services can help you solve *your* protection problems. Phone the ADT Central Station in your city or write to our New York Executive Offices.

ADT

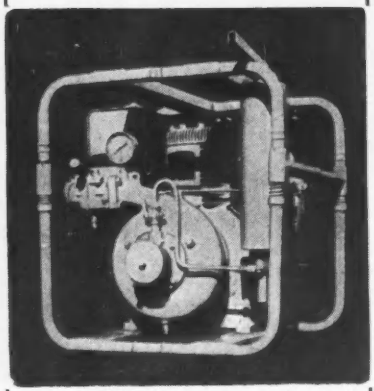
Controlled Companies of

AMERICAN DISTRICT TELEGRAPH COMPANY 155 SIXTH AVENUE, NEW YORK 13, N. Y.

HAS YOUR FIRE TRUCK A HALE TYPE FZZ?

". . . All Fire Trucks should have one or more"

says Fire Chief from Missouri



Above — This frame-mounted FZZ (with carrying handles turned in) can be easily carried to source of water which truck cannot reach, for refilling booster tank or for fighting fire direct. Unit is also available mounted on two truck-type wheels or on rubber-cushioned steel channels. **Note:** Discharge adapter can be supplied for use with 2½-in. hose.

Chief R. M. Wilson of Monroe City, Missouri, suggests that all Fire Trucks should have a Hale type FZZ portable pumping unit . . . He writes: "I want to tell you how pleased I am with this FZZ pump. We received it May 27th. On May 29th I was compelled to use it during a bad rain storm as our large pumper was unable to reach water supply. We put the little pump at a pond, used 500 ft. 1½" hose layout, and saved this farmer almost $2,000.00. **The FZZ gave a nice fire stream. The motor started on the first pull in a downpour of rain. Not one time did it stop. We used it for almost 2 hrs. Had we not had this portable pump, there was no way we could put out this fire. I think all fire trucks for Town or Country should have one or more."**

Above — FZZ Pumping Foam. (Foam proportioner built in if specified.)

With a ready-for-use Hale FZZ you can fight fires not only with solid stream and/or fog, but also with foam — a valuable weapon against gasoline truck fires.

The easily portable FZZ can be mounted in any apparatus, making it possible to fight fires while apparatus is in motion, using booster tank for source of water. CAPACITY 60 G.P.M. at 90 lbs. pressure; 150 G.P.M. at 30 lbs. pressure; ample reserve capacity. *Ask for demonstration; no obligation.*

Write today for FZZ FOLDER to:

HALE FIRE PUMP COMPANY

CONSHOHOCKEN, PA.

Fire Pumps in All Standard Capacities

TWO FIRES IN BROOKLYN

Coal Bunker near Manhattan Bridge

THIS four-story frame building was formerly used as a coal bunker. A rapid-spreading fire that involved the structure was attributed to small boys who had been playing in the vicinity. Coal dust aided the rapid spread of flames and the structure was completely involved when fire fighters arrived. Two fire boats and 17 engine companies, 6 ladder companies and 13 special units responded to alarms. Efforts were concentrated on protecting exposures which were endangered by radiant heat and flying embers. Three fire fighters were injured and initial estimates placed damage at $200,000.

"Eight-Alarmer" in Brooklyn Tenement District

WHEN fire involved the abandoned trolley barn, shown above, and spread rapidly through 11 tenement and factory buildings on June 30, it resulted in the first "eight alarm" response in the New York area for more than 10 years.

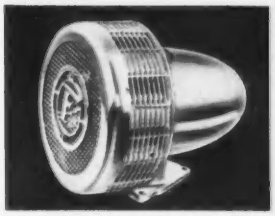
A total of 36 fire companies and New York City and Coast Guard fire boats saw action. More than 300 fire fighters and 55 pieces of apparatus were used during the "nine-nine" alarm fire. Seventeen fire fighters suffered injury and a watchman in the trolley barn was missing by the time the fire was brought under control. More than 500 persons were evacuated from their homes in the tenement buildings as Red Cross disaster units were brought into action.

The trolley barn was being converted for use by a paper box manufacturer and had a large inventory of stored paper and cardboard cartons which aided the rapid spread of fire. Initial estimates placed total damage in the vicinity of $1,000,000.

NOTE: YOU CAN SEE HIM TOO WITH HIS BEACON RAY!

Flashing 360°—commanding attention, giving all-round protection. Nothing like it. Write for bulletin.

Frankly, we doubt if anyone would (or would want to be near enough to) hear the "Q" above an atom blast. But, if ANY siren could be heard, you can bet it would be the Federal "Q"! . . . because Federal's "Q" is the LOUDEST, MOST PENETRATING siren you can buy! Federal, long maker of the best in sirens, has BETTERED THE BEST with this completely-new "Q" coaster siren. Its new motor produces greater sound volume with less current than many smaller sirens. New clutch gives exceptionally-long coasting period. Precision-built, rugged, super-powered, Federal "Q" is the BEST siren to protect and clear the way for your emergency vehicle! Write now for bulletin 301.



FEDERAL "Q" Siren

- **Loudest!**
- **Most powerful!**
- **Most penetrating!**

FEDERAL ENTERPRISES, INC.

FORMERLY: FEDERAL ELECTRIC COMPANY, INC.

8717 S. STATE STREET CHICAGO 19, ILLINOIS

LET YOUR FEET ENJOY
"Arm Chair" COMFORT

1. Selected upper leather.
2. Durable sole leather.
3. Soft, absorbing insoles.
4. Moulded right and left counters.
5. Double wood pegged shanks.
6. Moulded steel arch.
7. "Fomex" cushion insoles.

All Shoes Goodyear Welt Construction
Combination Lasts Union Made

Your feet will appreciate the way Fomex cradles your foot in a full length cushion of fluffy bubbles. An absolute, money back guarantee assures complete satisfaction.

NO. 200 — Water Repellent Full Double Chrome Leather Soles, Rubber Heels. Sizes 6 to 13 in B-C-D-E-EE widths. Black only.

$9.95

NO. 300 — Genuine Kangaroo Leather with Choice Oak Bend Soles. Rubber Heels. Sizes 6 to 13 in B-C-D-E-EE widths. Black only.

$9.95

You have ten days to examine Capitol Shoes. If you are not completely satisfied, return the shoes and your money will be promptly refunded.

We pay postage if check accompanies order. Shoes will be sent C.O.D. if you so desire.

CAPITOL SHOE CO.
922 W. Saginaw, Dept. F
LANSING 15, MICHIGAN

Please send me_____pair(s) of Capitol Shoes!!!
Prepaid ☐ C.O.D. ☐
I have worn Capitol Shoes before ☐
Style_____ Size_____ Width_____
Name_____
Address_____
City_____ Zone____ State_____
Position_____ Union Local No._____
I understand I may try Capitol Shoes 10 days and, if not absolutely satisfied, that my money will be completely refunded as soon as I return them.

CAPITOL SHOE CO.
922 W. SAGINAW ST.
LANSING 15, MICHIGAN

Railway Fire Prevention Car

GREAT Northern Railway of St. Paul, Minnesota, has placed in service a special instruction car to further a fire prevention and fire fighting educational program among supervisory officials and employees.

Equipped with the devices used on the railway to prevent and fight fire, the car will tour the Great Northern system for demonstration and study purposes. In addition to teaching fire prevention, the objective of the trip is to familiarize personnel, including fire brigades at shops and terminals, in use of the proper extinguishers while fires are in the incipient stage.

The unit is a rebuilt 69-foot baggage car, fashioned for its new use in the railway's Jackson Street Shops in St. Paul. First appearance after completion and tests was at Superior, Wis., on June 12. The railway's insurance department is in charge of the car, and it is accompanied by qualified personnel of that department.

The railway's educational program in prevention and use of proper equipment against all types of fires has been intensified as utilization of flammable liquids for fuel has increased. Consumption of oil and gasoline has expanded in operation of Diesel-electric locomotives and other modern equipment.

Various types of extinguishing equipment have been studied and tested. The car has a 1000-gallon water tank with a Gorman Rupp 175 gpm portable pump for supplying fog and straight stream nozzles where such pressure is not available in the instruction area. Foam, CO_2, and carbon tetrachloride extinguishers are also demonstrated by the personnel who travel with the car.

Interior view of the fire prevention car. At the further end are located the 1000 gallon tank, portable pump, and storage facilities for the variety of extinguishers.

●

New Instructor's Manual

W. FRED HEISLER of Oklahoma A. & M. College (member of NFPA Committee on Firemen's Training) has announced publication by the A. & M. College Bookstore at Stillwater of "Training Firemen" a new Instructor's Manual in Fire Service Training.

The new 8½ x 11 publication, designed for use by fire service instructors, was compiled by Professor Heisler in cooperation with the State Board for Vocational Education, Division of Trade and Industrial Education, the Oklahoma State Firemen's Association, Fire Service Training Association, and the Fire Prevention Department of the Western Actuarial Bureau. The text is specifically adopted for use in fire service training in 22 states and the Province of Ontario, Dominion of Canada, using the Oklahoma "Redbooks" as official training guides. It is available from the College Bookstore at $3 per copy.

Only JOHN BEAN *gives you both at once!*

RUGGED AND dependable John Bean HPV Fire Fighters are available in 500-, 600-, or 750-GPM capacities.

Two-fisted HPV Fire Fighter delivers unlimited hitting power

JOHN BEAN two-pump design makes the HPV Fire Fighter the most remarkable piece of equipment of its kind.

Because it combines volume and high-pressure fog, the John Bean HPV Fire Fighter is "first call" for any fire . . . under any conditions!

Two lines of fast-striking, true, high-pressure fog—which draw from the unit's own water supply—can be put into action instantly.

At the same time, when adequate water supply is available, three volume lines are ready to slug it out with the toughest of fires. And, of course, both sides can be operated together at *maximum efficiency!*

Protect your community with this revolutionary fire fighter that's years ahead of its nearest competitor. Write today—and ask for full information on John Bean HPV Fire Fighters.

John Bean Division
Dept. 127
Lansing 4, Michigan

JOHN fmc BEAN

TWO-FISTED FIRE FIGHTERS

Can be mounted on most standard truck chassis

John Bean Division
P. O. Box 145
San Jose, California

A PRODUCT OF FOOD MACHINERY AND CHEMICAL CORPORATION

Sidelights on Municipal Fire Protection

(*Continued from page 19*)

floor area with the largest subdivision 38,000 square feet in area. The municipal planners, which in this case consisted primarily of the water superintendent, decided they should install one additional hydrant. The water supply for this building is still limited to 1500 gallons per minute. The building, according to our concept of potential fire flow demand for a structure of that type, would probably require a fire flow of 4,000 to 5,000 gallons per minute for a period of six to ten hours.

JUST the other day I was in a city of 30,000 population. It happened to be "clean-up" day. Apparatus had just been washed and on the ramp in front of a beautiful fire headquarters stood six pieces of fire apparatus representing an investment in excess of $150,000 — three pumpers of 750 gpm or more capacity, a 45-foot ladder, an 85-foot aerial, and a beautiful salvage wagon.

The Chief asked "How does it look?"

I said, "It looks fine, but how does it operate? How many men do you have on duty this morning?"

He said, "Twelve."

Again somewhere we have missed the boat. These pumpers would not be used to their full capacity. They might as well have been 250 and 500 gpm pumpers because of the manpower deficiency.

So you might say: "Well, off-shift response and second alarm and third and fourth alarm bring the extra men and we therefore get to the capacity of those machines."

I say to you that we are not equipped to produce the capacity of our fire department pumping engines in most of our fire departments, excepting a very few which are fully manned. Fortunately many of our fires do not require the full protection of the capacity of apparatus.

But we must get back to that taxpayer and explain that situation to him. We must overhaul our thinking. I think that we in this field of fire protection have an obligation to acknowledge and appreciate these problems.

I wish you would bear these thoughts in mind. As fire protection engineers we do have a responsibility which goes beyond the grading schedule and the NFPA standards and those things which are normally held forth as qualifications of a fire protection engineer.

The New Carpenter
WIG-WAG REDHEAD
FOR FIRE, POLICE AND EMERGENCY CARS AND TRUCKS, AIRPLANES . . .

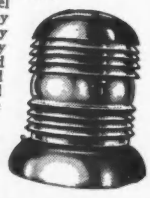
CLEARS YOUR WAY FOR SAFER, FASTER, QUIETER RUNS
The oscillating beam of this powerful, flashing WARNING LIGHT
CLEARS THE WAY . . . and fast!
Range of 1000-1500 feet and a sweep from side to side
FAR, FAR AHEAD
WARNS CARS APPROACHING AROUND INTERSECTIONS

TYPE WW6 (Illustrated). Flashing and Oscillating—6" diameter. Also Oscillating only, 6" diameter.
TYPE WW8. Flashing and Oscillating, 8" diam. Oscillating only, 8" diam.
TYPE 166. Same as above. Flashing but without Oscillator. 3800 foot range. 6" diameter.
TYPE 168. Same as 166. 8" diameter and 4500 foot range.
TYPE F'N'A (Fore'N'Aft). Like 166 except drum shaped with two reflectors and two colored lenses, one facing forward and one toward rear, flashing.
6 volt units will be shipped unless 12 volt specified. Specify other color if red is not wanted.

Type F-5 High Power Portalite

Finest Dry-Battery Light made. Clamps on 7½ volt dry battery pack. Moderate worklight for 24 consecutive hours or a powerful mile-range searchlight for 8-10 hours (much longer if used intermittently). Also available with rugged cast aluminum case for battery in Duro-Satin finish (Type BF-5).

Type RA-1 Red 360° Flashing Light For Cars



Cylindrical Fresnel Lens. Certified by E.T.I. Approved by Nat'l. Highway Comm. for work and repair cars and trucks, Fire and Police cars, public utility vehicles.
3¼ in. lens with high quality built-in flasher.
3¼ in. lens without flasher.
4½ in. lens with high quality built-in flasher.
4½ in. lens without flasher.

CARPENTER MANUFACTURING COMPANY
200 MASTER-LIGHT BLDG. BOSTON—45—SOMERVILLE, MASS.
"Master-Light Makers for 34 Years"

"I thought you —"

There Is A DARLEY CHAMPION for Every City and Rural Fire Service

500 GALLON UNDERWRITER PERFORMANCE PLUS HIGH PRESSURE FOG

A highly efficient pumper apparatus with the Champion Three Stage Centrifugal Pump powered by the 1952 International. The Pump is the Type SH500 which delivers 500 gallon Underwriter performance plus 60 gallons per minute at 850 lbs. for high pressure fog.

Or this Darley Apparatus is also available in Underwriter capacities of 600 GPM and 750 GPM — modern commercial truck motors having adequate power for the larger capacity pumps.

Write for Fire Apparatus Booklet

AT YOUR SERVICE: Sales and Service Representatives — East, Midwest, North, South

ESTABLISHED 1908

High Pressure Fog Pumps **W. S. DARLEY & CO., Chicago 12** Front and Midship Pumps

Factories — Chicago and Chippewa Falls, Wis.

FIRE and POLICE UNIFORMS

SHIRTS
BADGES
CAPS
ACCESSORIES

RUSSELL UNIFORM

NEW YORK

RUSSELL UNIFORM CO.
192 Lexington Ave.,
New York 16, N. Y.

Please send free catalog checked below:

☐ Fire Department Uniforms and Equipment
☐ Police Department Uniforms and Equipment

Mr. .....
Address .....
City..... Zone.... State...

LEATHER
No. 5-A

HELMETS BY CAIRNS

PLASTIC
No. 900

Write for Catalog 340

Cairns & Bros., Inc.

Allwood, Clifton, N. J.

116 Years in Fire Service

BETTER HOSE CARE – WITH

CIRCUL-AIR

THE AIR CONDITIONING
FIRE HOSE DRYER

Circul-Air is the patented, electrically operated hose dryer which circulates prewarmed fresh air through coiled wet hose at the rate of 5 to 6 air changes per minute. It's designed to lengthen hose life, improve the appearance and functional design of new fire houses, and to save floor space and hard work. No other drying method is so fast—so economical—so easy to use.

Circul-Air Dryers have passed the Approvals Tests and are listed by the Underwriter's Laboratories, Inc., Chicago and the Canadian Standards Association.

Write for Catalog TODAY

THE CIRCUL-AIR CORPORATION

575 East Milwaukee Detroit 2, Michigan

See . . .

VENTALARM®
WHISTLING TANK FILL SIGNAL

. . . and other

Scully Safety Devices

at

Booth #70

SCULLY
SIGNAL COMPANY
First Street
Cambridge 41, Mass.

Membership Report

ONE of the benefits that is available only to individuals and fire departments who have NFPA membership is the Book and Pamphlet Service. This service enables subscribers to receive all new NFPA publications automatically, including those for which there is a charge and those furnished without charge.

Many fire departments subscribe to this service through their NFPA memberships to assure that the latest authoritative information will be available to fire fighters preparing for promotional examinations.

If your fire department is an NFPA member department and desires to receive the Book and Pamphlet Service then an initial deposit of $10 should be sent to the NFPA Executive Office, 60 Batterymarch Street, Boston 10, Massachusetts, with the request for Book and Pamphlet Service.

Thereafter all new NFPA publications will be sent automatically to your fire department. When there is a charge for such publications the amounts will be deducted from the deposit until the $10 is exhausted. Then your fire department will be notified so that the service may be renewed, if desired.

The Book and Pamphlet Service also assures subscribers of receiving promptly those publications that have pre-publication discounts. This saves the trouble of applying for such publications before the dates when pre-publication discounts expire.

NFPA Welcomes:

Arkansas: Clarendon Volunteer Fire Department, Clarendon.

Illinois: Northern Tazewell Fire District, Washington.

Indiana: Centre Township Fire Department, South Bend.

Massachusetts: Wareham Forest Fire Department, West Wareham.

Michigan: Egelston Township Fire Department, Muskegon; Niles Fire Department, Niles.

New Jersey: L. H. Taylor Hose Company, High Bridge; Pleasantville Volunteer Fire Company No. 2, Pleasantville.

New York: Alplaus Volunteer Fire Company, Alplaus; New Hamburg Fire District, New Hamburg; Chief George Dingwall, Niagara Falls Fire Department, Niagara Falls.

Texas: Arlington Fire Department, Arlington; Wooster Volunteer Fire Department, Baytown; Pecos Fire Department, Pecos.

MAXIM

FIRE APPARATUS

HAS A COMPLETE LINE OF

Pumpers - 500 to 1500 R.P.M.

Ladder Trucks

Quadruples

Aerial Ladders

Airport Crash Trucks

★

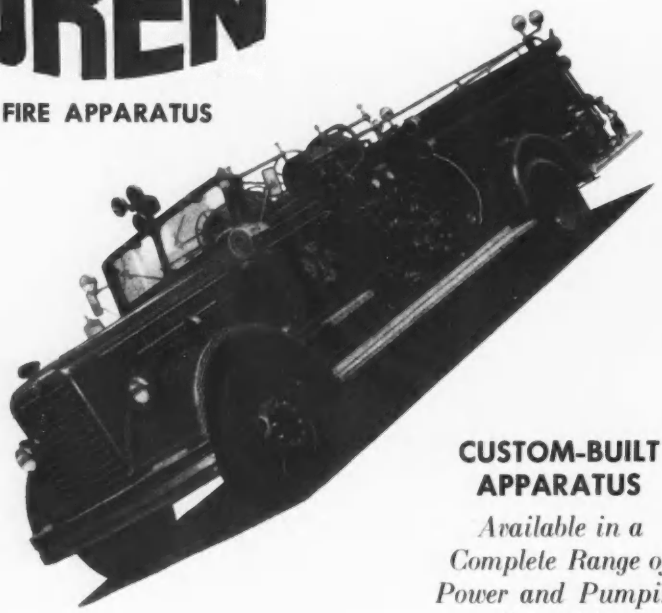
One of a fleet of new Maxim Trucks for Johnson City, Tenn.

MAXIM MOTOR COMPANY

MIDDLEBORO, MASS.

OREN

FIRE APPARATUS

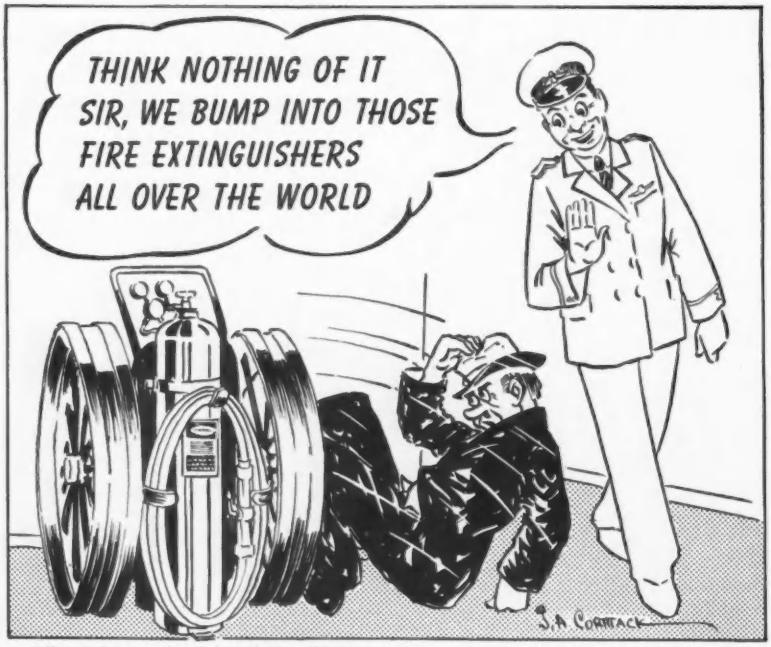


CUSTOM-BUILT APPARATUS

Available in a Complete Range of Power and Pumping Capacities

OREN ROANOKE CORP.

ROANOKE 16, VIRGINIA



Many thousands of Ansul Dry Chemical Fire Extinguishers are exported each year. They may be found in oil fields of Central and South America, in gold mines of South Africa, in the Arctic wastes of Iceland, Northern Canada and Alaska and even in the tropical paradises of the Dutch East Indies. In addition, airports all over the world use Ansul Equipment to protect lives and property against loss by fire.

It all goes to prove that the word gets around concerning the greater Fire-fighting effectiveness of Ansul Dry Chemical Fire Extinguishing Equipment.

ANSUL CHEMICAL COMPANY • **MARINETTE, WISCONSIN**

Indian Fire Fighters

INDIANS are unconsciously safety minded. They watch each other, help each other, and warn each other of impending danger. Among the organized crews, we have yet to experience a lost-time accident though they have logged many thousands of hours of the most hazardous work — a truly outstanding record.

Through the many centuries that these people have lived in the Southwest, their everyday customs and essentials of life have found expression in colorful ceremonial dances. The fire dances, harvest dances, rain dances, and many others are as much a part of their lives as eating and sleeping. On one occasion a Hopi crew, working on a particularly troublesome fire in southern California requested permission to put on a rain dance. Within 2 hours after their dance there was a veritable cloudburst. All that was left of the once troublesome fire was a mass of steaming mud. It would indeed have been difficult to convince any Indian in that group that the welcome rain was not a direct result of their ceremony. You can undoubtedly think of a number of organized fire crews that possess many of the qualities which make these Indian crews outstanding. Do you know of any that bring along their own rainstorms?

(*"Fire Control Notes," July 1952, published by the United States Forest Service.*)

Point to Remember

"The fire department that really accomplishes things is the department where every man is willing to assume his responsibility, and just a little bit extra if necessary; where they are up on their toes, and they take the job of putting the hose back on the wagon just as seriously as they do when they pull it off while there is a crowd around to appaud them when they put out the fire."

(*From an address by Rev. Walter C. Rundin, Chaplain, Nebraska State Volunteer Firemen's Association.*)

NFPA Inspection Manual

336 pp. $3.00 per copy

National Fire Protection Association
60 Batterymarch Street, Boston 10, Mass.

Metcalf
UNIFORM
FABRICS
Standard fabrics for over eighty years
TRADE MARK REG. U.S. PAT. OFF.
SPECIFY
386
STANDARD SERGES FROM 12 TO 20 OZ.
STANDARD TROPICALS FOR SHIRTS
All in Premier 386 Quality
ALSO BEAVERS IN 20 AND 30 OZ. WEIGHTS
USED BY FIRE DEPARTMENTS
OF LEADING CITIES
Sample Brochure Upon Request
METCALF BROS. & CO., INC.
45 EAST 17th STREET, NEW YORK CITY
FOR UNIFORM SATISFACTION

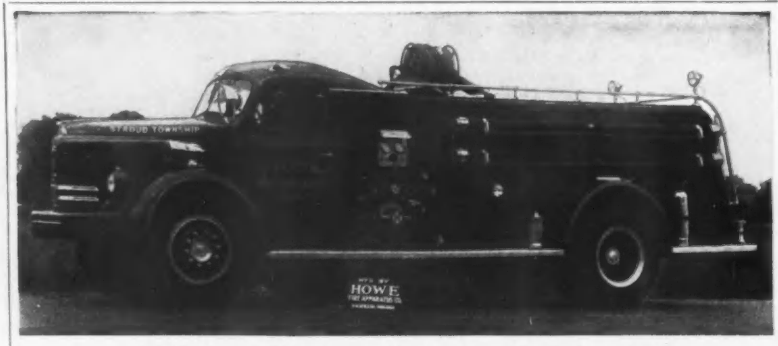
Publication Notice

THE Western Forestry & Conservation Association with headquarters at 712 U. S. National Bank Building, Portland 4, Oregon, has recently issued a booklet containing the Forest Laws of the State of Oregon. This is similar to a booklet containing the Forest Laws of the State of California. These are available from the above association at 50 cents per copy. The same organization also publishes the "Western Fire Fighter's Manual."

Western Pennsylvania Firemen's Association

THE 59th Annual Convention of the Western Pennsylvania Firemen's Association will be held in Pittsburgh, Pennsylvania, August 14–16. Headquarters will be in the Hotel William Penn. A number of social and sports activities have been arranged including a parade on the final day during which 31 prizes totalling $2,000 will be awarded to member and non-member competitors of the Convention.

"The Suit That Suits"
GLOBE
SUITS
FIREMEN'S STANDARD FOR OVER 50 YEARS
THE GLOBE has maintained its leadership through constant research and improvement. Latest example of this are the GLOBE Neoprene* Interlinings. More resistant to chemicals and aging than rubber, this absolutely waterproof interlining will not stiffen at below zero temperatures or soften in extreme heat. One more reason why YOU should buy GLOBE, the suit preferred by fire fighters everywhere.
See your dealer or write
GLOBE MANUFACTURING CO.
PITTSFIELD, N. H.
*Made with 100% DuPont Neoprene



HOWE Fire Truck Equipment Meeting Every Service Since 1872
Centrifugal, Rotary, and Piston Pumps supplied
HOWE FIRE APPARATUS COMPANY, 1406 West 22nd Street, Anderson, Indiana

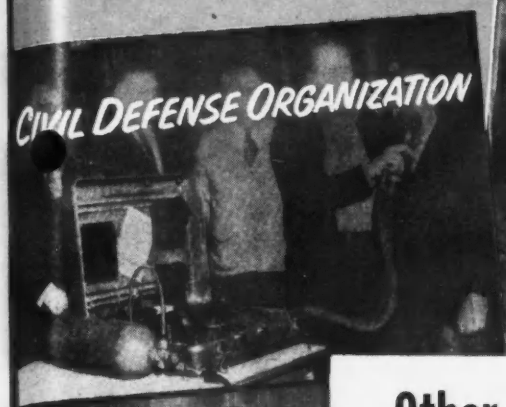
A-Bomb Shelter in Existing Buildings

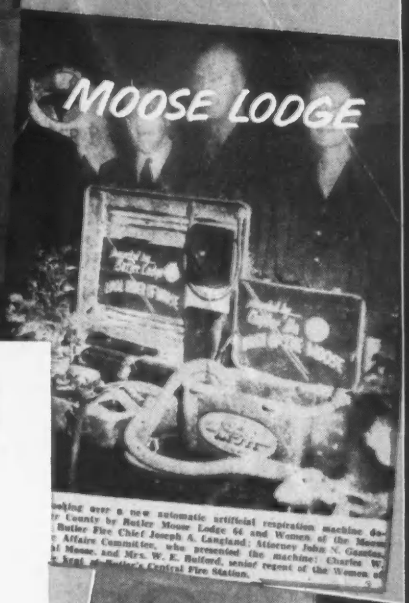
A TECHNICAL manual issued by the Federal Civil Defense Administration on the general subject of Shelter from Atomic Attack in Existing Buildings has been issued in two parts. Part I, Method for Determining Shelter Needs in Shelter Areas, was mentioned in the May 1952 issue of *Fire News*. The pamphlet was identified as TM-5-1, dated February 1952. A second pamphlet, Part II, Improvement of Shelter Areas, has been issued under date of May 1952 and is identified as TM-5-2.

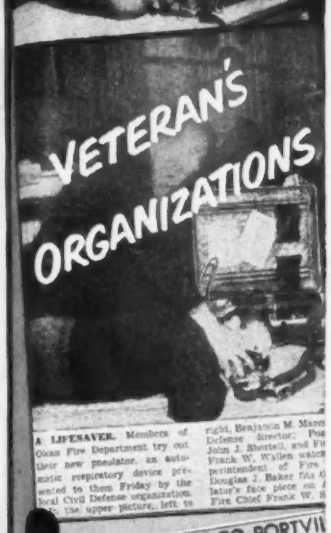
Among subjects covered by the second pamphlet are methods of improving the strength of floors serving as roofs of shelters and the provision of exits from basements of wall-bearing buildings. Part II contains a warning about fire hazards, not included in Part I, calling attention to the fact that fire susceptibility of the areas involved should have a direct influence on shelter locations. It is recommended that various factors such as building density, combustibility of buildings, hazardous occupancies and firebreaks should be studied carefully. It appropriately warns that shelters in high fire-risk areas may become death traps if exits are blocked or if a mass fire develops. These pamphlets may be obtained from the U. S. Superintendent of Documents, Washington 25, D. C., TM-5-1, 60 pages, 20 cents and TM-5-2, 36 pages, 15 cents.

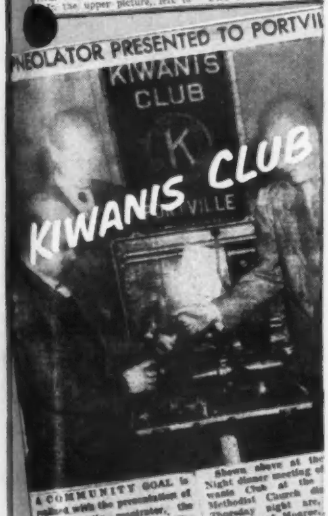
Georgia State Firemen's Association

MR. J. F. CANNON of the public Service Occupations Training at the Georgia Institute of Technology states that a group of Georgia fire departments have organized the Georgia State Firemen's Association. The initial meeting was held at the East Point Fire Department headquarters on April 24. Howard Schaffer was elected President, J. R. Rider, Vice President, and Max Wiggins Secretary-Treasurer. The first annual meeting will be held in September and district vice presidents are to be appointed. Tentative by-laws and Articles of Incorporation have been prepared.









Other Fire Departments got Pneolators this way...

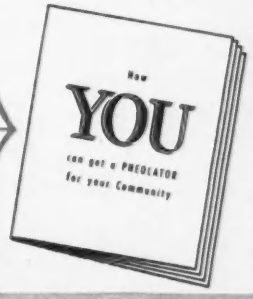
You can Too!

You want a Pneolator for your Department, but maybe you don't have the money to get one. Our special Pneolator Gift Program is the answer you have been looking for.

This program, directed to social, religious, or fraternal groups in your community, is designed to help your department point up the need for this automatic artificial respiration protection to these organizations. As you can see from the newspaper clippings on this page, once this need is emphasized, a Pneolator donation to the local Fire Department is the immediate and enthusiastic response.

Start Your Pneolator Gift Program Today!

Send for our booklet, "How YOU can get a Pneolator for your Community." It outlines your part of the program—tells you what we do to help put your department on the receiving end of a Pneolator donation. It has worked for others—it'll work for you. Clip and send coupon today!



MINE SAFETY APPLIANCES COMPANY
Braddock, Thomas and Meade Sts., Pittsburgh 8, Pa.
At Your Service: 68 Branch Offices in the United States
MINE SAFETY APPLIANCES CO. OF CANADA, LIMITED
Toronto, Montreal, Calgary, Winnipeg, Vancouver, New Glasgow, N.S.
Representatives in Principal Cities in Mexico, Central and South America
Cable Address "MINSAF" Pittsburgh

MSA
SAFETY EQUIPMENT HEADQUARTERS

Call the M.S.A. man on your every safety problem . . . his job is to help you.

MINE SAFETY APPLIANCES COMPANY
Pittsburgh 8, Pa.
We are interested in "How You Can Get a Pneolator . . ."
Please send a copy to:

NAME_____
TITLE_____
COMPANY_____
ADDRESS_____

What's New in Fire Equipment?

Mender for Rubber Coats

Alpha Chemical Company, P. O. Box 4854, Los Angeles 1, Calif., manufactures a mending fluid for the repair of cloth, leather, canvas, and other clothing materials. Manufacturer claims that the adhesive named "Fix-So" may also be used for repairing firemen's rubber coats. Further information obtained from the above address.

Safety and Maintenance Directory

The new 1952–1953 edition of "Best's Safety and Maintenance Directory" has been published by Alfred M. Best Company, Inc., 75 Fulton Street, New York 38, N. Y. The directory covers many types of safety maintenance applicable to personnel and property of industrial plants. The 8½ x 11 in. volume also has a section on fire protection equipment covering fire alarm systems, extinguishers and extinguishing systems, control equipment, and other miscellaneous fire fighting and rescue equipment. The book has 513 pages and is priced at $5 with discounts for quantity purchases. Requests for copies or for further information should be addressed to the manufacturer at the above address or at any of the branch offices in Atlanta, Boston, Chicago, Cincinnati, Dallas, Chattanooga or Los Angeles.

A. J. (Jack) Gilleo Retires

The Eureka Fire Hose Division of the United States Rubber Company of Rockefeller Center, New York 20, N. Y., announces the retirement of A. J. Gilleo as Manager of its Detroit office. His retirement climaxes a career of more than 30 years in the fire hose and equipment business. Mr. Gilleo had active membership in the Michigan Fire Chiefs' Association and is a member of the International Fire Chiefs' Association. He is being succeeded by Mr. Stuart J. Spalding.

Flameproof Fabric

Duracote Corporation, 350 N. Diamond Ave., Ravenna, Ohio, has announced the production of DURA-DECOR fabrics made of fiberglas reinforcing cloth. Manufacturer claims that the fire resistive material in the fabric, which is woven of strong pliable glass threads, is especially adaptable for use in public buildings such as schools, hospitals, theaters, and clubs. Further information may be obtained from the manufacturer.

Personnel Changes at Gamewell

The Gamewell Company of Newton Upper Falls, Mass., has announced several personnel changes. Mr. Frederic S. Bacon, Jr., has been named as General Sales Manager; Mr. Frank P. Joyce has been appointed Works Manager; Mr. William P. Gallant has been assigned to head the Personnel Department; and Mr. Bernard H. Breedlove has been appointed Sales Promotion and Advertising Manager.

Fire Extinguisher Firm Receives Contract

Stop-Fire, Inc., of 125 Ashland Place, Brooklyn, New York, has been selected by the U. S. Air Force to produce 13,000 type A-20 hand-operated portable fire extinguishers using chlorobromomethane. An earlier experimental order for 6,000 of these fire extinguishers was designed specifically for Air Force use. The firm has a commercial model named "Redi-Grip" which is based upon the design used in these models.

Pamphlet on Fire Retardant Coatings

A colorful 8-page pamphlet explaining the use of Albi fire retardant coatings has been produced by Albi Manufacturing Company, Inc., 98 East Main Street, Rockville, Connecticut. The pamphlet provides guide charts for the use of the different coatings and includes recommendations for surface preparation, coverage and type of materials for which the coatings are to be used.

Alfco Anti-Statik Horn

A BUILT-IN device which grounds static electricity and eliminates shock to operators of CO_2 fire extinguishers having hose connections, is announced by American-LaFrance-Foamite Corporation of Elmira, New York. The Alfco Anti-Statik Horn shown above has a pair of copper conductor strips on the inside surface of the horn, molded in place and electrically bonded through the nozzle and the metal braid of the hose to the carbon dioxide cylinders. Manufacturer will send literature upon request.

WATER when and where you want it!

with HARODIKES Portable Canvas Water Tanks

THE ECONOMICAL AND EFFICIENT WAY TO CARRY AND STORE WATER.

ON THE JOB - ON THE SPOT KEEPING AMERICA GREEN

EXCLUSIVE FEATURES

- Self Supporting
- Easily Back-packed
- Ideal for Relay Pumping
- Easily Transported

Available in 150 & 300 gallon sizes

A WATER SUPPLY AT THE SCENE OF THE FIRE

Write TODAY for Full Information and Price List

HARODIKES, INCORPORATED

NORTH DIGHTON, MASSACHUSETTS

INDEX TO ADVERTISERS

	Page
American District Telegraph Company	29
American-Marsh Pumps, Inc.	24
Ansul Chemical Company	38
John Bean Division, Food Machinery & Chemical Corporation	33
V. H. Blackinton & Co., Inc.	27
Cairns & Brother, Inc.	36
Capitol Shoe Company	32
Cardox Corporation	5
Carpenter Mfg. Company	34
Circul-Air Corporation	36
W. S. Darley & Company	35
Federal Enterprises, Inc.	31
Gamewell Company	6
Globe Mfg. Company	40
Hale Fire Pump Company	30
Clifford B. Hannay & Son, Inc.	4
Harodikes Inc.	42
Howe Fire Apparatus Company	40
Maxim Motor Company	37
Metcalf Brothers & Company	39
Midwestern Mfg. Company	28
Mine Safety Appliances Company	41
Oren Roanoke Corporation	38
Powhatan Brass & Iron Works	28
Pyrene Mfg. Company	25
Rockwood Sprinkler Company	2, 3
Russell Uniform Company	36
Scully Signal Company	36
D. B. Smith & Company	23

Distribute These Materials During

Fire Prevention Week --- October 5 - 11

Put them in Homes, Stores, Industrial Properties, Churches, Clubs and other occupancies.

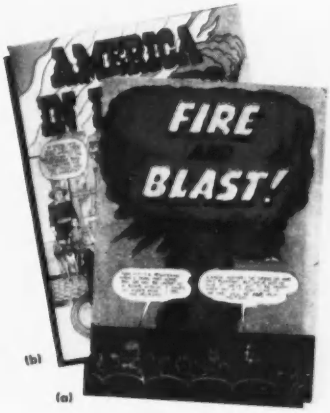
1. **POSTER — Red and Black 12x16**

2. **"FACTS ABOUT FIRE" 8½x11**
4 pg. rotogravure pictorial fact sheet

3. **DISPLAY CARD 12x16**
2 colors
Reproduction of Poster With Easel Attached

6. **STICKER 1½x1⅛**
Perforated — Use on outgoing correspondence, packages, etc.

4. **COLORING BOOK — Red and Black, 16 pages of outline drawings for coloring by children, with fire prevention in song and story.**



5. **FIRE COMIC BOOKS 7½x10**
(a)16 pages — Full color — Shows vital part fire fighting plays in disaster or defense of nation.
(b)16 Pages — Full color — Story of Major North American Conflagrations.

7. **FLYER — Two colors 5½ 8½**
Useful envelope stuffer

8. **INSPECTION BLANKS — 8½x11**
A. Self-inspection form for Industrial Plants (one color)
B. Junior Firefighters Report (two colors) Home inspection blank for school distribution
C. Self-inspection blank for Merchants (one color)

9. **FOLDERS — In several colors 6¼x3¼**
For including in letters, home distribution, etc.

PRINTED IN U.S.A.

WRITE TODAY TO THE NFPA! USE ORDER BLANK ON BACK PAGE.

FIREMEN
60 BATTERYMARCH ST.
BOSTON 10, MASS., U.S.A.

Tennessee Valley Authority
Technical Library
Knoxville, Tenn.

Sec. 34.65 (d) P. L. & R.
U. S. POSTAGE
PAID
Permit No. 766
Boston, Mass.

POSTMASTER: If undeliverable FOR ANY REASON, notify sender, stating reason, on Form 3547.

1952 Fire Prevention Week

October 5 - 11

Get your Fire Prevention Week materials early!

President Truman, the Governor-General of Canada, and the governors of the several states of the Union will proclaim the week of October 5-11 as Fire Prevention Week. NFPA member fire departments and other members of the fire service can get prompt delivery of helpful "ammunition" by using the order blank below.

On the inside of this page will be found a number of illustrations showing some of the materials available for this year's Fire Prevention Week Campaign. Below is a complete list of posters, information sheets, booklets and other attractive publications. Indicate on this blank the amounts of materials that you want for distribution in your community or in your industry. Mail the list to the NFPA Executive Office, 60 Batterymarch Street, Boston 10, Massachusetts.

Place your order NOW! Orders received after September 24 cannot be accepted.

CLIP ALONG THIS LINE AND MAIL TO ADDRESS BELOW

ORDER BLANK

F-9-52

Quantity

_____ 1. Poster — $2.50 per 100, $17.50 per 1000.
_____ 2. Facts About Fire — $2.00 per 100, $15.00 per 1000.
_____ 3. Display Card — 25c each, discount for quantities.
_____ 4. Coloring Book — 5c each, $5.00 per 100, $45.00 per 1000.
5. Comic Books — 5c each, $45.00 per 1000.
_____ (a) Fire and Blast.
_____ (b) America in Flames.
_____ 6. Sticker — 15c for sheet of 50, discount for quantities.
_____ 7. Flyer — $1.00 per 100, $7.00 per 1000.
_____ 8. (a) Industrial — $1.00 per 100, $7.50 per 1000.
_____ (b) Home Inspection Blank — $1.00 per 100, $7.50 per 1000.
_____ (c) Mercantile — $1.00 per 100, $7.50 per 1000.

Quantity

_____ 9. (a) Folder — $1.50 per 100, $12.50 per 1000.
_____ (b) Folder — $2.00 per 100, $17.50 per 1000.
_____ (c) Folder — $2.00 per 100, $17.50 per 1000.
_____ (d) Folder — $2.00 per 100, $17.50 per 1000.
_____ (e) Folder — $2.00 per 100, $17.50 per 1000.

NOT ILLUSTRATED BUT AVAILABLE

_____ Fire Prevention Week Handbook — complete plans for a successful campaign — 15c each.
_____ Firerule — slide rule which reveals fire causes, proper prevention, etc. 3¾ x 8, red and black. 3c each, $3.00 per 100, $25.00 per 1000.
_____ Fire Foibles — 5c each, $5.00 per 100, $45.00 per 1000.
_____ Preventing Home Fires — 25c each, discount for quantities.

Mail to: NATIONAL FIRE PROTECTION ASSOCIATION
60 Batterymarch Street - Boston 10, Massachusetts

NAME _____

ADDRESS _____

CITY _____ STATE _____

Prices subject to 2% discount if payment accompanies order. All prices F.O.B. Boston. Orders shipped express collect. NFPA members may receive single copy of all items gratis. Others may receive sample of all items except "Handbook" and Display Card (item 3) free upon request. Items No. 1, 2, 4, and 9 (a) (b) (c) (d) (e) have space for imprints of names of campaign sponsors which may be added locally by purchasers.